SHERWIN-WILLIAMS DEVELOPMENT PROJECT RESPONSE TO COMMENTS DOCUMENT

SCH: 2004122083

LSA

June 2016

SHERWIN-WILLIAMS DEVELOPMENT PROJECT RESPONSE TO COMMENTS DOCUMENT

SCH: 2004122083

Submitted to:

Miroo Desai, AICP, Senior Planner
City of Emeryville
1333 Park Avenue
Emeryville, California 94608-3517

Prepared by:

LSA Associates, Inc.
2215 Fifth Street
Berkeley, California 94710
510.540.7331

LSA

June 2016

TABLE OF CONTENTS

I. INTRODUCTION 1
- A. PURPOSE OF THE RESPONSE TO COMMENTS DOCUMENT 1
- B. ENVIRONMENTAL REVIEW PROCESS 1
- C. DOCUMENT ORGANIZATION 2

II. LIST OF COMMENTERS 3
- A. ORGANIZATION OF COMMENT LETTERS AND RESPONSES 3
- B. LIST OF AGENCIES COMMENTING ON THE DRAFT EIR 3

III. COMMENTS AND RESPONSES 7
- A. FEDERAL, STATE, REGIONAL, AND LOCAL AGENCIES 17
- B. ORGANIZATIONS 60
- C. INDIVIDUALS 275
- D. PUBLIC HEARING COMMENTS 378

IV. DRAFT EIR TEXT REVISIONS 389

APPENDIX

Appendix A: Air Quality Data
Appendix B: Trip Generation Memorandum
Appendix C: MXD Model Validation Data

FIGURES

Figure IV.A-1 Revised: Existing Land Uses 397

TABLES

Table III-1: Required Permits and Approvals 57
Table III-5: Approximate Project Construction Schedule 116
Table V-2: Applicable General Plan Goals, Policies, and Programs 123
Table IV.E-4: Annual Greenhouse Gas Emissions (Metric Tons/Service Population/Year) 140
Table RTC-1: Intersection Level of Service 157
Table IV.D-5: Project Construction Emissions in Pounds Per Day 245
Table IV.D-6: Project Regional Emissions 245
Table II-1: Summary of Impacts and Mitigation Measures from the EIR 390
Table III-1: Required Permits and Approvals 395
Table IV.D-5: Project Construction Emissions in Pounds Per Day 400
Table IV.D-6: Project Regional Emissions 400

This page intentionally left blank.

I. INTRODUCTION

A. PURPOSE OF THE RESPONSE TO COMMENTS DOCUMENT

This document has been prepared to respond to comments received on the Draft Environmental Impact Report (Draft EIR) prepared for the Sherwin-Williams Development Project (project) proposed for an approximately 10.05-acre site located in the City of Emeryville. The Draft EIR identifies the likely environmental consequences associated with development of the proposed project, and recommends mitigation measures to reduce potentially significant impacts. This Response to Comments (RTC) Document provides responses to comments on the Draft EIR and makes revisions to the Draft EIR, as necessary, in response to those comments or to make clarifications in the Draft EIR. This document, together with the Draft EIR, constitutes the Final EIR for the proposed project.

B. ENVIRONMENTAL REVIEW PROCESS

According to the California Environmental Quality Act (CEQA), lead agencies are required to consult with public agencies having jurisdiction over a proposed project and to provide the general public with an opportunity to comment on the Draft EIR.

The City circulated a Notice of Preparation (NOP) to help identify the types of impacts that could result from the proposed project, as well as potential areas of controversy. The NOP was originally published on December 15, 2014, and was distributed to local, regional, and State agencies. A scoping session for the preparation of the EIR was held at 6:30 p. m. on January 27, 2015, at Emeryville City Council Chambers. The original scoping period ended on January 30, 2015, but an extension of the scoping period was provided by the City and the extended scoping period ended on February 27, 2015. Comments received by the City on the NOP were taken into account during the preparation of the Draft EIR.

The Draft EIR was made available for public review on January 8, 2016 and was distributed to local and State responsible and trustee agencies. The Draft EIR and an announcement of its availability were posted electronically on the City's website, and hard copies were available for public review at the Emeryville City Hall.

The 60-day public comment period ended on March 8, 2016. The City held a hearing on the Draft EIR on January 27, 2015 at City Council Chambers. Copies of all written comments received during the comment period and notes of the oral comments received at the public hearing are included in Chapter III of this document.

C. DOCUMENT ORGANIZATION

This RTC Document consists of the following chapters:

- *Chapter I: Introduction*. This chapter discusses the purpose and organization of this RTC Document, and the Final EIR, and summarizes the environmental review process for the project.
- *Chapter II: List of Commenters*. This chapter contains a list of agencies, individuals and organizations who submitted written comments during the public review period and comments made at the public hearing on the Draft EIR.
- *Chapter III: Comments and Responses*. This chapter contains reproductions of all comment letters received on the Draft EIR, as well as a summary of verbal comments on the Draft EIR provided at the public hearing. A written response for each CEQA-related comment received during the public review period is provided. Each response is keyed to the corresponding comment.
- *Chapter IV: Draft EIR Text Revisions*. Corrections to the Draft EIR that are necessary in light of the comments received and responses provided, or necessary to amplify or clarify material in the Draft EIR, are contained in this chapter. Double underlined text represents language that has been added to the Draft EIR; text with ~~strikeout~~ has been deleted from the Draft EIR.

II. LIST OF COMMENTERS

This chapter presents a list of comment letters received during the public review period and describes the organization of the letters and comments that are provided in Chapter III, Comments and Responses, of this document.

A. ORGANIZATION OF COMMENT LETTERS AND RESPONSES

Chapter III includes a reproduction of each comment letter received on the Draft EIR. The written comments are grouped by the affiliation of the commenter, as follows: Federal, State, regional and local agencies (A), organizations (B), individuals (C), and commenters (D) at the January 27, 2016 Planning Commission hearing.

The comment letters are numbered consecutively following the A, B, C and D designations defined below:

Federal, State, Regional, and Local Agencies ..... A#-#
Organizations ..... B#-#
Individuals ..... C#-#
Public Hearing ..... D#

Comment letters are numbered and comments within each letter are numbered consecutively after the hyphen. Each speaker at the public hearing has been designated with a number as well.

B. LIST OF AGENCIES COMMENTING ON THE DRAFT EIR

The following comment letters were submitted to the City during the public review period.

Federal, State, Regional, and Local Agencies

A1 Department of Transportation, Patricia Maurice (February 23, 2016)

A2 East Bay Municipal Utility District, David Rehnstrom (February 29, 2016)

A3 Alameda County Transportation Commission, Tess Lengyel (March 4, 2016)

A4 Department of Toxic Substances Control, Karen Toth (March 7, 2016)

Organizations

B1 Residents United for a Livable Emeryville, Ruth Major (March 6, 2016)

B2 45th Street Artist's Cooperative, Richard Grassetti (March 7, 2016)

B3 Park Avenue Residents Committee (March 8, 2016)

B4 Emeryville Residents for Responsible Development, Ellen L. Wehr (March 8, 2016)

B5 45th Street Artist's Cooperative, John DeMerritt (March 8, 2016)

Individuals

C1 Will Leben (January 25, 2016)

C2 Richard D. Ambro, Phd (January 27, 2016)

C3 Greg Harper (March 6, 2016)

C4 Laura McCamy (March 7, 2016)

C5 Ann Holsberry and Gary Grimm (March 7, 2016)

C6 Brian Donahue (March 7, 2016)

C7 Alicia Gallo (March 7, 2016)

C8 Nora Pauwels (March 7, 2016)

C9 John Scheuerman (March 7, 2015)

C10 Mike McConnel (March 7, 2016)

C11 Kristin Peterson (March 8, 2016)

C12 Jack Ghizzoni (March 8, 2016)

C13 Erin Fong (March 8, 2016)

C14 Anna C. Shimko (March 8, 2016)

C15 Kevin Ma (March 8, 2016)

C16 Canan Tolon (March 8, 2016)

C17 Sharon Wilchar (March 8, 2016)

C18 Louise Stanely (March 8, 2016)

C19 Richard Heng (March 8, 2016)

C20 Tim Curran (March 8, 2016)

Commenters on the Draft EIR, Public Hearing February 25, 2016

D1 Rudolph Brooks

D2 Francis Rodriquez

D3 Jason Gumataotao

D4 Angela Martin

D5 Richard Grassetti

D6 Sharon Wilchar

D7 Kristin Peterson

D8 Gary Grimm

D9 John Demerrit

D10 Nora Pauwels

D11 Paul Germain

D12 Kevin Kellogg

D13 Judy Timmel

D14 Bryan Hord

D15 Kate Rutter

D16 Archana Horsing

D17 Louise Stanley

D18 Mike McConnell

D19 Edythe Bresnahan

D20 Tim Curran

This page intentionally left blank.

III. COMMENTS AND RESPONSES

Written responses to each comment letter received on the Draft EIR are provided in this chapter. All letters received during the public review period on the Draft EIR are provided in their entirety. Each letter is immediately followed by responses keyed to the specific comments. The letters are grouped by the affiliation of the commenting entity as follows: federal, State, regional, and local agencies (A), organizations (B); and individuals (C). A summary of the oral comments provided during the January 25, 2016 public hearing and responses to comments related to CEQA are also provided (D).

Please note that text within individual letters that has not been numbered does not raise environmental issues or relate to the adequacy of the information or analysis within the Draft EIR, and therefore no comment is enumerated or response required.

Many of the comments received on the Draft EIR involve variations of the same key issues. In order to consolidate responses to questions and comments related to these topics, and to address concerns comprehensively, master responses have been prepared. Master responses are provided below and referenced in certain responses, as appropriate.

Where revisions to Draft EIR text are called for, the page is set forth, followed by the appropriate revision. Added text is indicated with double underlined text. Deleted text is shown in ~~strikeout~~. Text revisions are summarized in Chapter IV of this Response to Comments Document.

Several commenters raised questions about the Project Description (Chapter III of the Draft EIR) and made suggestions that the EIR is inadequate because the document does not detail how the applicant would obtain the development bonus points required to build the proposed project.

In response to these concerns Master Response 1 details the City's submission requirements and approval process, and Master Response 2 focuses on the City's Development Bonus System.

Master Response 1: Planned Unit Development/Preliminary Development Plan (PUD/PDP) Submittal and Approval Process

The City of Emeryville's Planning Regulations Sections 9-7.1001 through 9-7.1014 outline the submittal requirement and approval process for Planned Unit Developments (PUDs). A PUD is a two-stage process that includes a Preliminary Development Plan (PDP), followed by one or more Final Development Plans (FDPs). The PDP is the "master plan" for the site that details the physical layout of the streets, open space and building sites. A PDP must be approved by the City Council and sets the "zoning" for the site. Approval of the PDP is then followed by one or more FDPs that provide greater detail about the individual buildings. FDPs are approved by the Planning Commission and only go to the City Council if appealed. The applicant has applied for a PDP, and that is the "project" that is analyzed in this EIR. If this EIR is certified and the PDP approved, the applicant would then submit individual FDPs for review and approval.

Section 9-7.1005(d) states that a PUD may modify any of the standards in Chapter 4, Site Development Regulations, except those that are set by the General Plan, including building intensity (floor area ratio), height, and residential density. A PUD must provide public benefits and affordable housing units pursuant to Section 9-4.204, "Development Bonuses," to qualify for bonus floor area ratio, height, and/or residential density. The Sherwin-Williams PDP application proposes bonus building intensity (floor area ratio), height and residential density. In order for the decision-makers to approve the PDP, the proposal must be in compliance with Section 9-4.204.

Section 9-7.1006 (a) outlines submittal requirements for a PDP application. Specifically, it states that plans should include details necessary to establish the physical scale and character of the development and demonstrate the relationship among its constituent land uses, buildings and structures, public facilities, and open space. These plans should, at a minimum, indicate perimeter boundaries of the site; approximate location and dimension of streets, driveways, sidewalks, pedestrian ways, off-street parking and loading areas, buildings and structures; a conceptual lighting plan for the buildings and adjacent parking and pedestrian travel areas, utilization of buildings and structures, including activities and the number of living units; reservations for public uses, including schools, parks, playgrounds, and other open spaces; location, sizing and preliminary design of stormwater treatment measures; and major landscaping proposals.

A PDP application does not require submission of plans that provide detailed building and landscaping plans and elevations; plans for street improvements; grading; site improvement; traffic control; drainage; sewer; and lighting plans. Such detailed plans are part of the Final Development Plan (FDP) process and not part of the PDP submittal (Section 9-7.1009).

Once the PDP application is approved by the City Council upon recommendation of the Planning Commission, the applicant needs to submit FDPs for the individual buildings, which must be approved by the Planning Commission before any grading or building permit may be issued. The FDP plans provide design details for each of the buildings, streets and open spaces. The plans may be submitted as one FDP or as multiple FDPs. FDPs are considered by the Planning Commission and they go to the City Council only if the Planning Commission decision is appealed.

The City has confirmed that the applicant has provided the level of information required by the City's PDP requirements. This Master Response addresses a number of comments that assert that not enough information has been submitted. It should be further noted that information required by the CEQA Guidelines for a "Project Description" has also been submitted, and are appropriately incorporated in Chapter III, Project Description of the Draft EIR. Specifically, the CEQA Guidelines identify the following information that is required in an EIR (Section 15124):

> The description of the project shall contain the following information but should not supply extensive detail beyond that needed for evaluation and review of the environmental impact.
>
> (a) The precise location and boundaries of the proposed project shall be shown on a detailed map, preferably topographic. The location of the project shall also appear on a regional map.
>
> (b) A statement of objectives sought by the proposed project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of

overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project.

(c) A general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities.

(d) A statement briefly describing the intended uses of the EIR.

(1) This statement shall include, to the extent that the information is known to the lead agency,

(A) A list of the agencies that are expected to use the EIR in their decision-making, and

(B) A list of permits and other approvals required to implement the project.

(C) A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies. To the fullest extent possible, the lead agency should integrate CEQA review with these related environmental review and consultation requirements.

(2) If a public agency must make more than one decision on a project, all its decisions subject to CEQA should be listed, preferably in the order in which they will occur. On request, the Office of Planning and Research will provide assistance in identifying state permits for a project.

Therefore, the project before the Planning Commission and City Council (approval of a PDP application for the Sherwin-Williams development project) has been adequately described in the Draft EIR for consideration by the decision-makers and evaluation in the Draft EIR.

Master Response 2: Development Bonus

Several commenters raised questions about the Project Description (Chapter III of the Draft EIR) and made suggestions that the EIR is inadequate because the document does not detail how the applicant would obtain the Development Bonus points required to build the proposed project.

As required by CEQA, the Draft EIR evaluates the project as proposed, and identifies and mitigates to the extent feasible the potential environmental impacts associated with the proposed project. The Draft EIR is not required to determine whether the applicant can or evaluate how the project would meet the requirements to be awarded Development Bonus points. The EIR does not define or design the project, but simply evaluates the project identified by the City as Lead Agency and proposed by the applicant. Additionally, the EIR does not mandate how the project *should* meet the City's design and development regulations, as that is the purview of the Planning Commission and, ultimately, the City Council, per the process identified in Master Response 1. Through the approval and review process, the City Council will determine whether the applicant has met the City's PUD and PDP requirements. The Development Bonus system is described below for informational purposes.

The project is described in Chapter III, Project Description of the Draft EIR. As noted on page 51 of the Draft EIR, the height limits, number of residential units, and floor area proposed as part of the project evaluated within the Draft EIR are based on the Development Bonus provisions of the

Emeryville Planning Regulations, as amended, that allow for additional development intensity to be approved with the provision of affordable housing units and certain community benefits.[1] Per the Planning Regulations, at least 50 percent of the required bonus points must be from provision of affordable housing units and no more than 50 percent may be from community benefits such as public open space, utility undergrounding, additional affordable housing units and contribution to a Citywide Fund to Support Small Local Serving Businesses.

To provide clarification that the project would need to provide affordable housing to achieve bonus points under Section 9.4.204, page 449 of the Draft EIR is revised as follows:

> **h. Housing Element**. Programs applicable to the proposed project from the November 2014 Housing Element include H-2-1-1, H-2-1-2, H-7-2-1, H-7-2-5 and H-7-3-1. ~~The proposed project would not include affordable housing on the project site. However, the~~ The proposed project would seek a development bonus for both project development options in exchange for public benefits. The procedure for obtaining bonus points is outlined in Section 9.4.204 of the Emeryville Planning Regulations. The Planning Regulations allow developers to choose between the bonus system under Section 9.4.204 or that allowed under the State Density Bonus System, provided that the project requires no more than a 35 percent density bonus. Under the Planning Regulations the project requires a 100 percent density bonus, and therefore must use the bonus system under Section 9.4.204. The City encourages new housing development within the City's Priority Development Area (PDA) in keeping with regional greenhouse reduction strategies. The proposed project is envisioned by the City as a potential infill redevelopment site within the City's PDA. The proposed project would also comply with the City's Stormwater Ordinance and include features that would help prevent stormwater intrusion.

To provide clarification that the project would need to provide affordable housing to achieve bonus points under Section 9.4.204, Table V-2 on page 469 of the Draft EIR would also be revised and is shown in Chapter IV of this Response to Comments Document. Whether affordable housing is specifically included in the Project Description, and how the applicant would provide affordable housing to achieve the necessary bonus points does not affect or impact the CEQA analysis of the project contained in the EIR in any respect as a change in the affordability of the units to be provided would not have a measurable effect regarding the potential impacts of the project on the environment.

The procedure for obtaining bonus points is outlined in Section 9.4.204 of the Emeryville Planning Regulations. The Planning Regulations allow developers to choose between the bonus system under Section 9.4.204 or that allowed under the State Density Bonus System, provided that the project requires no more than a 35 percent density bonus. Under the Planning Regulations the project requires a 100 percent density bonus, and therefore must use the bonus system under Section 9.4.204. As stated in the Draft EIR, the applicant has not yet determined how the project would obtain the required bonus points. However, the CEQA analysis of the proposed project as outlined in Chapter III of the Draft EIR adequately evaluates the potential physical impacts associated with the project. As noted above, the City Council will ultimately determine whether the applicant has met the requirements to receive the required number of development bonus points to construct the project as

[1] The City Council amended Section 9.4.204 of the Emeryville Planning Regulations on October 20, 2015. Resolution 15-129.

currently proposed. If the applicant has not received the required number of Development Bonus points, the project could not be constructed as proposed and the applicant would either need to re-design the project to obtain additional bonus points or re-design the project so that it could be built using whatever bonus points were awarded. The reader should note that as the applicant moves through the PDP and FDP review process, if there are changes to the proposed project as described and evaluated within the Draft EIR, those changes would be reviewed by the City as Lead Agency against the findings of the Final EIR and additional CEQA evaluation may be required if the revised project were to result in additional impacts not identified in the Final EIR.

The consistency of the project with the City's policies and programs was evaluated in both Section IV.A, Land Use and Chapter V. Planning Policy. As stated on page 439 of the Draft EIR, "Policy conflicts are not in and of themselves considered significant environmental impacts under CEQA unless they would result in physical environmental impacts. Where policy conflicts could result in physical environmental impacts, such as regional air quality and transportation, applicable policies are discussed in those individual sections. Potential conflicts between proposed and existing land uses in the vicinity of the project site are described in Section IV.A, Land Use." Section IV.A, Land Use found that the proposed project would be generally consistent with the City's General Plan and Park Avenue District Plan policies, and that the proposed project would be consistent with surrounding land uses.

It is also important to note that the determination of whether a project is consistent with a specific policy can be subjective, and that consistency determinations are best made with a broad understanding of the often-competing policy objectives in a planning document. As a result, policy consistency determinations are ultimately made by the local decision-making body. As previously discussed, the City of Emeryville is the Lead Agency for environmental review of the project. Therefore, the City's Planning Commission and City Council will ultimately determine the project's consistency with the City's applicable plans and policies. The Draft EIR in each topical section and in Chapter V. Planning Policy provides the decision-makers with a list of the goals, policies and guidelines that are pertinent to the project and project area, and makes a recommendation regarding whether or not the proposed project would directly conflict with relevant planning directives. These recommendations are intended to supplement the decision-makers' own understanding of the various policy considerations. As stated above, a conflict with an applicable policy is not itself a significant impact unless it results in a significant environmental impact, and the City Council is the ultimate authority on whether, as a whole, the project is in conflict with City policies and programs.

Master Response 3: Hazardous Materials and Remediation

This Master Response provides a discussion of the environmental investigation and remediation activities performed and continuing to be required at the project site on both the Sherwin-Williams parcel and the Successor Agency parcel in response to commenters concerns regarding residual levels of contamination still at the site, potential effects of removing contaminated materials, vapor intrusion, and measures to protect workers, future residents and visitors to the site. As stated in the Draft EIR on page 37:

> "The Sherwin-Williams Company owned and operated a paint and coating manufacturing plant on the Sherwin-Williams parcel beginning in the early 1900s. Pesticides were also manufactured at the plant from the 1920s until the mid-1940s. The plant was converted from

> oil-based to water-based paint production in 1987 and stopped all production in 2006. In December 2006, the Sherwin-Williams Company discontinued its operations and decommissioned the manufacturing plant. The Successor Agency parcel is currently undeveloped and was historically used for railroad spurs and a small rail yard from the early 1900s into the late 1980s. It was acquired by the Emeryville Redevelopment Agency in 2006 for park purposes. Both parcels have been subject to remedial actions to address contamination due to prior land uses… all of the buildings on the Sherwin-Williams parcel, with the exception of one building, have been demolished. The building (Building 1-31, technically two buildings but functioning as a single building) is classified as a "Tier 1 Architecturally Significant Building" by the City of Emeryville. Remediation of soil contamination has been completed and the site has been backfilled with clean soil and graded smooth at approximately the elevation of the former truck docks fronting on Sherwin Avenue. Groundwater monitoring continues under the direction of the State Department of Toxic Substances Control (DTSC)."

The Draft EIR Section I, Hazards and Hazardous Materials describes the many phases of environmental investigation and remediation activities that have been performed at the project site (described on Draft EIR pages 296 to 302), and discloses that residual levels of contamination in the subsurface of the project site remain (Draft EIR pages 299 to 302). A human health risk assessment (HHRA) was prepared under the oversight of DTSC in 2005 for the Sherwin-Williams parcel, and the results of the HHRA were used in the development of cleanup goals for the Remedial Action Plan (RAP) based on an unrestricted residential exposure scenario (Draft EIR page 297).

An Operations & Maintenance (O&M) Plan and Land Use Covenant (LUC) for the Sherwin-Williams parcel have been approved by DTSC (Draft EIR page 299). The LUC imposes environmental restrictions on the parcel because volatile organic compounds (VOCs) and arsenic remain in groundwater and/or soil gas above the unrestricted cleanup goals as defined in the RAP. The O&M Plan describes long-term monitoring and O&M activities to be performed for remedial features installed at the Sherwin-Williams parcel to ensure that remedial measures and engineering controls continue to be effective in preventing potential exposure of the public to hazardous materials which are present in the subsurface of the Sherwin-Williams parcel. A similar O&M Plan may be developed for the Successor Agency parcel if required by DTSC, as discussed on page 318 of the Draft EIR.

The restrictions and requirements of the LUC for the Sherwin-Williams parcel are intended to prevent potential exposure of construction workers, the public, and the environment to hazardous materials which are present in the subsurface of the Sherwin-Williams parcel (Draft EIR page 302). These restrictions and requirements include prohibiting construction or development activities which are inconsistent with the remediation features or which may disturb or adversely affect the integrity or effectiveness of remediation features without written approval from DTSC. The LUC also indicates that annual inspection reports must be prepared and submitted to DTSC to document that the restriction and requirements of the LUC are being complied with, which includes not interfering with the remediation measures unless approved by DTSC (Draft EIR page 303).

The Draft EIR (page 317) acknowledges that soil and groundwater affected by hazardous materials may be disturbed and/or removed as a result of construction activities, which could pose a potential health risk to construction workers, who would potentially come into direct contact with or inhale dust or vapors from contaminated soil and groundwater, as well as the nearby public, who could be affected by contaminants in fugitive dust or vapors from the project site. Additionally, if impacted

soil and groundwater were improperly managed and disposed of during construction, these materials could be released into the environment and pose a potential risk to future site occupants, other members of the public, and the environment (Draft EIR page 317).

Disturbance and management of soil and groundwater at the Sherwin-Williams parcel would be performed in accordance with the restrictions and requirements of the LUC, which includes DTSC review and approval of proposed activities that would disturb soil or potentially affect installed remediation features on the Sherwin-Williams parcel (Draft EIR page 317). Therefore proposed construction plans must be submitted to DTSC for review and approval, as indicated in Table III-4 of the Draft EIR, as revised. This process would include DTSC review and approval of the proposed foundation design and construction method to ensure that the proposed construction design and activities would not adversely affect the integrity or effectiveness of remediation features.

Mitigation Measure HAZ-2c (Draft EIR page 317) requires a LUC to be prepared for the Successor Agency parcel. The restrictions and requirements of this LUC would prevent potential exposure of construction workers, the public, and the environment to known and potential unidentified hazardous materials in the subsurface of the Successor Agency parcel, and are described in detail on page 317 of the Draft EIR.

Mitigation Measure HAZ-2d (Draft EIR page 318) requires preparation of a Soil Management Plan (SMP) for the Successor Agency parcel and the Sherwin-Williams parcel for DTSC review and approval. The mitigation measure requires that the SMP include notification and response procedures if previously unidentified areas of potential soil or groundwater contamination are discovered, and guidelines for importing clean fill materials. The SMP would also be required to include guidelines for groundwater dewatering, treatment, and/or discharge, and groundwater transportation and disposal. Potential emissions of vapors (including petroleum hydrocarbons) during excavation activities would be addressed by the vapor control procedures required to be included in the SMP (Draft EIR page 318). As required by Mitigation Measure HAZ-2d (starting on page 318), the SMP must be revised if previously unidentified environmental hazards are discovered which require additional measures to be incorporated into the SMP to ensure protection of construction workers, the surrounding public, and the environment, such as changes in health and safety requirements (e.g., worker training or personal protective equipment requirements), material handling/sampling protocol, or air monitoring requirements. As specified in Mitigation Measure Haz-2d (Draft EIR page 319), any revisions to the SMP must be reviewed and approved by DSTC prior to conducting soil or groundwater disturbing activities that would be affected by the revisions to the SMP.

Compliance with the restrictions and requirements of the LUC for the Sherwin-Williams parcel and implementation of the SMP that would be developed for both parcels and the proposed project would effectively prevent potential exposure of construction workers, the public, and the environment to known and potential unidentified hazardous materials in the subsurface of the Sherwin-Williams parcel, including potential unidentified areas of hazardous materials impacts beneath the Building 35 concrete pad. Investigation of the Building 35 area has been performed as indicated by the locations of previous borings presented on Figure 2-3 of the RAP prepared by CDM Smith (available for review at the City's Planning Department). DTSC provided oversight of the development and implementation of the RAP, and did not require remedial activities beneath the Building 35 concrete pad.

Post remediation soil gas monitoring has been performed at the Sherwin-Williams parcel (Draft EIR pages 300 to 302). Further evaluation of soil gas conditions and potential vapor intrusion to indoor air would be performed for the Sherwin-Williams property at DTSC's discretion. Based on a discussion with DTSC, additional evaluations of soil gas conditions and indoor air quality would be required prior to construction of proposed buildings on the Sherwin-Williams parcel, in accordance with the LUC for the Sherwin-Williams parcel, however, an evaluation of soil gas conditions and indoor air quality throughout the entire Sherwin-Williams parcel would not be required, as the results of the soil gas sampling reported during 2006-2007 and 2012-2013 have been deemed to be sufficient to determine where additional soil gas sampling may be required.[2]

To provide clarification regarding the evaluation of vapor intrusion, performance standards, and feasible measures to achieve performance standards that could be required by DTSC for the Sherwin-Williams parcel, Mitigation Measure HAZ-2a on page 316 of the Draft EIR is revised as follows:

> Mitigation Measure HAZ-2a: As a condition of approval for construction permits for the Sherwin-Williams parcel, an evaluation of soil gas conditions and indoor air quality shall be performed on the Sherwin-Williams parcel and Department of Toxic Substances Control (DTSC) review and approval for construction shall be obtained. If the evaluation of soil gas conditions indicates that vapor intrusion to indoor air could pose a significant health risk for future occupants (e.g., if vapor intrusion could result in an excess cancer risk of greater than one in a million or an appropriate health risk threshold determined by DTSC), DTSC may require further investigation and/or implementation of engineering controls (e.g., installation of sub-slab vapor barriers and ventilation systems) to address the potential for vapor intrusion to indoor air. If engineering controls are required by DTSC to mitigate vapor intrusion risks, operations, maintenance, and monitoring of the engineering controls would be required by DTSC to ensure their effectiveness and demonstrate that performance standards are being achieved (e.g., monitoring of sub-slab concentrations of VOCs to demonstrate that the sub-slab ventilation system is functioning properly and that concentrations of VOCs are not accumulating beneath buildings that could exceed the level of protection offered by sub-slab vapor barriers). If the performance standards for the engineering controls are not achieved, additional engineering controls would be required by DTSC (e.g., converting a passive sub-slab ventilation system to an active sub-slab ventilation system, or maintaining positive pressure within buildings using the heating, ventilation, and air conditioning [HVAC] systems). The City shall ensure that the requirements specified by DTSC~~, such recommendations shall be~~ are implemented prior to occupancy of the proposed structures.

An evaluation of soil gas conditions and potential effects on indoor air quality has not been performed for the Successor Agency parcel where a building is proposed on Parcel C-1 under development Option A. Residual impacts from petroleum hydrocarbons remain in soil and groundwater beneath the Successor Agency parcel, and based on its proximity to the southern portion of the Sherwin-Williams parcel, it is possible that historic activities at the Sherwin-Williams parcel have resulted in the presence of VOCs in groundwater that may have migrated beneath the Successor Agency parcel. An evaluation of soil gas conditions and indoor air quality would be required to be performed at the

[2] Toth, Karen, DTSC Supervisor. 2016. Personal communication between Cem Atabek of BASELINE and Karen Toth of DTSC. April 14.

Successor Agency parcel prior to construction of a new building on Parcel C-1 under development Option A, as required by Mitigation Measure HAZ-2b. For DTSC to provide oversight of the evaluation of soil gas conditions and indoor air quality on the Successor Agency parcel, as required by Mitigation Measure HAZ-2b, the City needs to sign a reimbursement agreement to fund DTSC's oversight prior to requesting their review of documentation relating to the Successor Agency parcel.

To provide clarification regarding the evaluation of vapor intrusion, performance standards, and feasible measures to achieve performance standards that could be required by DTSC for the Successor Agency parcel, Mitigation Measure HAZ-2b on page 316 of the Draft EIR is revised as follows:

> Mitigation Measure HAZ-2b: As a condition of approval for construction permits for residential housing on the Successor Agency parcel (under development Option A), an evaluation of soil gas conditions and indoor air quality shall be performed on the Successor Agency parcel and DTSC review and approval for construction shall be obtained. If the evaluation of soil gas conditions indicates that vapor intrusion to indoor air could pose a significant health risk for future occupants (e.g., if vapor intrusion could result in an excess cancer risk of greater than one in a million or an appropriate health risk threshold determined by DTSC), DTSC may require further investigation and/or implementation of engineering controls (e.g., installation of sub-slab vapor barriers and ventilation systems) to address the potential for vapor intrusion to indoor air. If engineering controls are required by DTSC to mitigate vapor intrusion risks, operations and maintenance and monitoring of the engineering controls would be required by DTSC to ensure their effectiveness and demonstrate that performance standards are being achieved (e.g., monitoring of sub-slab concentrations of VOCs to demonstrate that the sub-slab ventilation system is functioning properly and that concentrations of VOCs are not accumulating beneath buildings at concentrations that could exceed the level of protection offered by sub-slab vapor barriers). If the performance standards for the engineering controls are not achieved, additional engineering controls would be required by DTSC (e.g., converting a passive sub-slab ventilation system to an active sub-slab ventilation system, or maintaining positive pressure within buildings using the HVAC systems). The City shall ensure that the requirements specified by DTSC~~, such recommendations shall be~~ are implemented prior to occupancy of the proposed structures.

Detailed mitigation measures with performance standards have been developed to address potentially significant impacts related to hazardous materials which were not addressed by previously conducted environmental evaluations performed under DTSC or the restrictions and requirements established by DTSC in the LUC for the Sherwin-Williams parcel. Future environmental evaluations performed as part of these mitigation measures and compliance with the restrictions and requirements of LUCs (including review of plans [e.g., the SMP] and foundation designs) would also be performed under DTSC oversight to ensure that the proposed project would not result in significant impacts related to hazardous materials.

DTSC oversight is required for the implementation of mitigation measures related to hazardous materials as well as the construction and operation of the proposed project, which would ensure suitability of the Project site for the proposed land uses.

In conclusion, further remediation of the project site is not planned, as the presence of residual contamination is being addressed by: 1) the LUC and O&M Plan for the Sherwin-Williams parcel, 2) the SMP that would be prepared for the project site as required by Mitigation Measure HAZ-2d; 3) the LUC that would be developed for the Successor Agency parcel, as required by Mitigation Measure HAZ-2c; and 4) further evaluations of soil gas conditions and indoor air quality and implementation of engineering controls, if necessary, to address the potential for vapor intrusion to indoor air, as required by DTSC and Mitigation Measures HAZ-2a and HAZ-2b as revised. Therefore, the Draft EIR does not defer future study of potential adverse impacts related to project implementation, nor does it defer analysis of existing conditions at the site or mitigation of potential impacts.

A. FEDERAL, STATE, REGIONAL, AND LOCAL AGENCIES

Letter

A1

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
P.O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-6053
FAX (510) 286-5559
TTY 711
www.dot.ca.gov

Serious Drought.
Help save water!

February 23, 2016

ALA080139
ALA-80-PM 3.5
SCH# 2004422083

Ms. Miroo Desai
Planning Division
City of Emeryville
1333 Park Avenue
Emeryville, CA 94608

Sherwin-Williams Development Project – Draft Environmental Impact Report

Dear Ms. Desai:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the project referenced above. The project proposes to divide the site into new parcels and roadways and construct a mixed-use development. Two potential development options are presented; and both options include to retain and reuse the Sherwin-Williams Building with five new additional structures. At buildout, the project includes a total of 649,000 square feet (540 units) of residential space and 94,600 square feet of commercial space. Regional access to the project site is provided by Interstates 580, Interstate 80, and State Route 123. Our comments seek to promote the State's smart mobility goals that support a vibrant economy and build active communities rather than sprawl. We have reviewed the Draft Environmental Impact Report (DEIR) and have the following comments to offer. 1

Mitigation Responsibility
As the lead agency, the City of Emeryville (City) is responsible for identifying and ensuring the coordinated implementation of all project mitigation, including any needed improvements to State highways. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures. 2

Transportation Analysis
According to Impact TRANS-8, at the State Route 123 (San Pablo Avenue) and 40th Street Intersection (Figure IV.C-9, Project Distribution, #27), vehicle queues are projected to exceed the available storage on the southbound San Pablo Avenue left turn movement even before the addition of project traffic (DEIR, pg. 70). Its corresponding Mitigation Measure TRANS-8 only proposes to reduce this impact by providing increased travel options and require fee contributions to updating traffic signal timing that will accommodate travel patterns and minimize spillback. 3

Letter
A1
Cont.

The California Manual on Uniform Traffic Control Devices acknowledges that midblock crossings are unexpected by motorists, and alerting them of its presence is of utmost significance. On high-volume roads with four or more lanes, a crosswalk without other improvements may increase the rate of pedestrian-vehicle collisions. Therefore, Mitigation Measure TRANS-8 shall consider all modes of travel and include pedestrian safety aspects covering "Pedestrian Crosswalk Enhancements" at the existing mid-block pedestrian crossing. **3 cont.**

Vehicle Trip Reduction

Caltrans encourages the City to locate future housing, jobs and employee-related services near major mass transit centers with connecting streets configured to facilitate walking and biking. This would promote mass transit use thereby reducing regional vehicle miles traveled (VMT) and traffic impacts. The project includes Transportation Demand Management (TDM) strategies such as bike sharing, bicycle storage, and electrical vehicle stations. Consider additional strategies such as unbundling of residential parking, dedicated car-sharing parking, and providing transit passes or subsidies to residents and employees to further promote transit. Identification of a TDM coordinator responsible for implementation and ongoing operation of TDM measures at the project site is encouraged. TDM programs should be monitored and documented with annual reports to demonstrate effectiveness. This smart growth approach is consistent with MTC's Regional Transportation Plan/Sustainable Community Strategy goals of both increasing non-auto mode transportation, and reducing per capita VMT by 10 percent each. **4**

Transportation Management Plan (TMP)

If it is determined that traffic restrictions and detours are needed on or affecting state highways, a TMP or construction traffic impact study may be required of the City for approval by Caltrans prior to construction. TMP's must be prepared in accordance with Caltrans' *Manual on Uniform Traffic Control Devices.* Further information is available for download at the following web address: http://www.dot.ca.gov/hq/traffops/engineering/mutcd/pdf/camutcd2014/Part6.pdf. **5**

Encroachment Permit

Please be advised that any work or traffic control that encroaches onto the State Right-of-way (ROW) requires an encroachment permit that is issued by Caltrans. Required roadway improvements should be completed prior to issuance of the Certificate of Occupancy. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to the following address: David Salladay, District Office Chief, Office of Permits, California Department of Transportation, District 4, P.O. Box 23660, Oakland, CA 94623-0660. See the following website for more information: http://www.dot.ca.gov/hq/traffops/developserv/permits. **6**

Letter
A1
Cont.

Should you have any questions regarding this letter or seek additional information, please contact Sherie George at (510) 286-5535 or sherie.george@dot.ca.gov.

Sincerely,

PATRICIA MAURICE
District Branch Chief
Local Development - Intergovernmental Review

COMMENTER A1

Department of Transportation
Patricia Maurice
February 23, 2016

Response A1-1: This comment is introductory in nature, and does not raise concerns regarding the environmental analysis or information contained within the Draft EIR. Please see Responses A1-3 through A1-6 which respond to concerns the commenter raised within this letter.

Response A1-2: The comment regarding City of Emeryville responsibilities is noted. This comment does not raise concerns regarding the environmental analysis or information contained within the Draft EIR.

Response A1-3: Mitigation Measure TRANS-8 acknowledges that physical modifications to San Pablo Avenue at 40th Street to increase vehicle queue storage would potentially have adverse secondary impacts to the existing mid-block pedestrian crossing of San Pablo Avenue between Park Avenue and 40th Street, and no physical improvements were identified. The Mitigation Measure requires payment of the transportation impact fee and retiming of the traffic signal in response to changing travel patterns in the cumulative condition to minimize vehicle queues for all movements. Reduction of queues in the southbound direction would minimize the opportunity of queue backups into the pedestrian crossing. No changes to the existing pedestrian crossing are recommended as part of this mitigation. As the effectiveness of this measure is unknown, the impact was classified as significant and unavoidable.

Response A1-4: The project will be conditioned to develop and implement a transportation demand management (TDM) program that includes provisions for monitoring.

It should be noted that the trip generation estimates used in the Draft EIR already considered the non-motorized infrastructure that would be constructed with the project, and also considered the applicable City requirements that would apply to this project, including the preparation of a TDM plan, maximum parking supply, unbundling of parking prices and establishment of a bike share pod within the project vicinity. The Draft EIR analysis also included a trip reduction factor that took these TDM improvements into account.

Additionally, a VMT assessment was also conducted for the project. Results of this assessment indicate that the proposed project would generate VMT per capita at rates approximately 25 percent lower than the existing city-wide average VMT per capita based on the Alameda CTC model, exceeding the regional goal.

Response A1-5: The comment regarding the potential need for a Transportation Management Plan (TMP) or construction traffic impact study for improvements effecting State highway facilities is noted. This comment does not raise concerns regarding the environmental analysis or information contained within the Draft EIR.

Response A1-6: The comment regarding the potential need for a State Right-of-Way encroachment permit is noted. This comment does not raise concerns regarding the environmental analysis or information contained within the Draft EIR.

Letter
A2

EAST BAY
MUNICIPAL UTILITY DISTRICT

February 29, 2016

Miroo Desai, Senior Planner
Planning and Building Department
1333 Park Avenue
Emeryville, CA 94608

Re: Notice of Availability of a Draft Environmental Impact Report for the Sherwin-Williams Development Project, Emeryville

Dear Ms. Desai:

East Bay Municipal Utility District (EBMUD) did not receive a Notice of Availability of the Draft Environmental Impact Report (DEIR) for the Sherwin-Williams Development Project located in the City of Emeryville. Please ensure that all future environmental documentation notices are addressed to: 1

East Bay Municipal Utility District
Manager of Water Distribution Planning Division, MS 701
P.O. Box 24055
Oakland, CA 94623-1055

EBMUD provided comments on the Revised Notice of Preparation of the DEIR on January 13, 2015. EBMUD's original comments (see Enclosure A) still apply regarding water service, wastewater service, water recycling, and water conservation, except the need for a new Water Service Assessment (WSA). As described in EBMUD's letter dated May 13, 2015 (see Enclosure B), the WSA prepared on January 5, 2005 is still valid for the revised project. 2

If you have any questions concerning this response, please contact Timothy R. McGowan, Senior Civil Engineer, Major Facilities Planning Section at (510) 287-1981.

Sincerely,

David J. Rehnstrom
Manager of Water Distribution Planning

DJR:SHT:dks
sb16_032.docx

Recycled Paper

Letter
A2
Cont.

Enclosures:

A. Letter to Miroo Desai, Senior Planner, City of Emeryville Planning and Building Department from EBMUD dated January 13, 2015
B. Letter to Miroo Desai, Senior Planner, City of Emeryville Planning and Building Department from EBMUD dated May 13, 2015

Letter
A2
Attach.

EAST BAY
MUNICIPAL UTILITY DISTRICT

January 13, 2015

Miroo Desai, Senior Planner
City of Emeryville
1333 Park Avenue
Emeryville, CA 94608-3517

Dear Ms. Desai:

Re: Revised Notice of Preparation of a Draft Environmental Impact Report for the Sherwin-Williams Site Redevelopment, Emeryville

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Revised Notice of Preparation of a Draft Environmental Impact Report (EIR) for the Sherwin-Williams Site Redevelopment located in the City of Emeryville (City). EBMUD has the following comments. 3

WATER SERVICE

Pursuant to Section 15155 of the California Environmental Quality Act Guidelines and Sections 10910-10915 of the California Water Code, a Water Supply Assessment (WSA) will be required as the project would demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling unit project. While EBMUD approved a WSA for the project on March 10, 2005, a new WSA may be required due to the changes in scope of the project. Please submit a written request to EBMUD to determine if a new WSA is required or if the approved WSA is still valid. Preparation of the WSA will require that EBMUD contact the project sponsor to gather data and estimates of future water demands for the project area. Please be aware that the WSA can take up to 90 days to complete from the day the request was received. 4

EBMUD's Central Pressure Zone, with a service elevation range between 0 and 100 feet, will serve the proposed development. A main extension, at the project sponsor's expense, will be required to serve the proposed development. Off-site pipeline improvements, also at the project sponsor's expense, may be required depending on domestic water demands and fire flow requirements set by the local fire department. Off-site pipeline improvements include, but are not limited to, replacement of existing pipelines to the project site. When the development plans are finalized, the project sponsor should contact EBMUD's New Business Office and request a water service estimate to determine costs and conditions for providing water service to the proposed development. Engineering and installation of water mains, off-site pipeline improvements, and services require substantial lead-time, which should be provided for in the project sponsor's development schedule. 5

The Notice of Preparation indicates the potential for contaminated soils or groundwater to be present within the project site boundaries. The project sponsor should be aware that EBMUD will not inspect, install or maintain pipeline in contaminated soil or groundwater (if groundwater is present at any time during the year at the depth piping is to be installed) that must be handled as a hazardous waste or that may pose a health and safety risk to construction or maintenance personnel wearing Level D personal protective equipment. Nor will EBMUD install piping in areas where groundwater contaminant concentrations exceed specified limits for discharge to sanitary sewer systems or sewage treatment plants. Project sponsors for EBMUD services requiring excavation in contaminated areas must submit copies of existing information regarding soil and groundwater quality within or adjacent to the project boundary. **6**

In addition, the project sponsor must provide a legally sufficient, complete and specific written remedial plan establishing the methodology, planning and design of all necessary systems for the removal, treatment, and disposal of all identified contaminated soil and/or groundwater. EBMUD will not design the installation of pipelines until such time as soil and groundwater quality data and remediation plans are received and reviewed and will not install pipelines until remediation has been carried out and documentation of the effectiveness of the remediation has been received and reviewed. If no soil or groundwater quality data exists or the information supplied by the project sponsor is insufficient, EBMUD may require the project sponsor to perform sampling and analysis to characterize the soil being excavated and groundwater that may be encountered during excavation or perform such sampling and analysis itself at the project sponsor's expense. **7**

WASTEWATER SERVICE

EBMUD's Main Wastewater Treatment Plant (MWWTP) and interceptor system are anticipated to have adequate dry weather capacity to accommodate the proposed wastewater flows from this project and to treat such flows provided that the wastewater generated by the project meets the requirements of the EBMUD Wastewater Control Ordinance. However, wet weather flows are a concern. The East Bay regional wastewater collection system experiences exceptionally high peak flows during storms due to excessive infiltration and inflow (I/I) that enters the system through cracks and misconnections in both public and private sewer lines. EBMUD has historically operated three Wet Weather Facilities (WWFs) to provide primary treatment and disinfection for peak wet weather flows that exceed the treatment capacity of the MWWTP. Due to reinterpretation of applicable law, EBMUD's National Pollutant Discharge Elimination System (NPDES) permit now prohibits discharges from EBMUD's WWFs. Additionally, the seven wastewater collection system agencies that discharge to the EBMUD wastewater interceptor system ("Satellite Agencies") hold NPDES permits that prohibit them from causing or contributing to WWF discharges. These NPDES permits have removed the regulatory coverage the East Bay wastewater agencies once relied upon to manage peak wet weather flows. **8**

A federal consent decree, negotiated among EBMUD, the Satellite Agencies, the Environmental Protection Agency (EPA), the State Water Resources Control Board (SWRCB), and the Regional Water Quality Control Board (RWQCB), requires EBMUD and the Satellite Agencies to eliminate WWF discharges by 2036. To meet this requirement, actions will need to be taken over time to reduce I/I in the system. The consent decree requires EBMUD to continue implementation of its Regional Private Sewer Lateral Ordinance (www.eastbaypsl.com), construct various improvements to its interceptor system, and identify key areas of inflow and rapid infiltration over a 22-year period (from 2014 through 2036). Over the same time period, the consent decree requires the Satellite Agencies to perform I/I reduction work including sewer main rehabilitation and elimination of inflow sources. EBMUD and the Satellite Agencies must jointly demonstrate at specified intervals that this work has resulted in a sufficient, pre-determined level of reduction in WWF discharges. If sufficient I/I reductions are not achieved, additional investment into the region's wastewater infrastructure would be required, which may result in significant financial implications for East Bay residents. **9**

To ensure that the proposed project contributes to these legally required I/I reductions, the lead agency should require the project applicant to comply with EBMUD's Regional Private Sewer Lateral Ordinance. Additionally, it would be prudent for the lead agency to require the following mitigation measures for the proposed project: (1) replace or rehabilitate any existing sanitary sewer collection systems, including sewer lateral lines to ensure that such systems and lines are free from defects or, alternatively, disconnected from the sanitary sewer system, and (2) ensure any new wastewater collection systems, including sewer lateral lines, for the project are constructed to prevent I/I to the maximum extent feasible while meeting all requirements contained in the Regional Private Sewer Lateral Ordinance and applicable municipal codes or Satellite Agency ordinances. **10**

WATER RECYCLING

EBMUD's Policy 9.05 requires that customers use non-potable water, including recycled water, for non-domestic purposes when it is of adequate quality and quantity, available at reasonable cost, not detrimental to public health and not injurious to plants, fish and wildlife to offset demand on EBMUD's limited potable water supply.

The project's site is immediately adjacent to EBMUD's existing East Bayshore Recycled Water Project distribution pipeline in Emeryville extending along Horton Street. This project presents several opportunities for recycled water uses ranging from landscape and park irrigation, toilet flushing and other non-potable commercial applications that can be served by the current active recycled water pipelines in the vicinity of the proposed development. Therefore, EBMUD recommends that the City and their developers maintain continued coordination and consultation with EBMUD as they implement the various components of the Sherwin Williams Development regarding providing recycled water for appropriate non-potable uses. If recycled water use is required as determined by **11**

Letter
A2
Attach.

EBMUD, the applicant will be responsible for extension of recycled water pipelines to the proposed development and within the development. **11 cont.**

WATER CONSERVATION

The proposed project presents an opportunity to incorporate water conservation measures. EBMUD requests that the City include in its conditions of approval a requirement that the project sponsor comply with Assembly Bill 325, "Model Water Efficient Landscape Ordinance," (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495). The project sponsor should be aware that Section 31 of EBMUD's Water Service Regulations requires that water service shall not be furnished for new or expanded service unless all the applicable water-efficiency measures described in the regulation are installed at the project sponsor's expense. **12**

If you have any questions concerning this response, please contact David J. Rehnstrom, Senior Civil Engineer, Water Service Planning, at (510) 287-1365.

Sincerely,

William R. Kirkpatrick
Manager of Water Distribution Planning

WRK:TRM:dks
sb15_003.docx

cc: Bruce Dorfman
TDP East Bay Partners LLC
39 Forrest Street, Suite 201
Mill Valley, CA 94941

Joe Ernst
SRM Associates
2220 Livingstone Street, Suite 208
Oakland, CA 94606

Richard Weaver
SWACE, LLC
c/o Sherwin-Williams Company
101 Prospect Avenue, N.W.
Cleveland, Ohio 44115-1075

Letter
A2
Attach.

EAST BAY
MUNICIPAL UTILITY DISTRICT

May 13, 2015

Miroo Desai, Senior Planner
City of Emeryville
1333 Park Avenue
Emeryville, CA 94608-3517

Re: Satisfaction of Water Supply Assessment for the Sherwin-Williams Development Project, Emeryville

Dear Ms. Desai:

This letter is in response to your request dated March 6, 2015 for water agency consultation concerning the reconfirmation of the Water Supply Assessment (WSA) for the revised Sherwin-Williams Development Project located in the City of Emeryville (City). East Bay Municipal Utility District (EBMUD) appreciates the opportunity to provide this response.

On January 5, 2005, EBMUD received a request from the City for a WSA for the Sherwin-Williams Emeryville Site Redevelopment Project. Pursuant to Sections 10910-10915 of the California Water Code, EBMUD approved the WSA and provided the City a written response to the WSA on March 10, 2005 (see attached).

The estimated demand for the Sherwin-Williams Emeryville Site Redevelopment Project consisting of 577 dwelling units and 35,000 square feet of commercial space in the approved WSA was about 110,000 gallons per day (gpd). EBMUD's estimate of water demand for the revised project of 540 dwelling units, 94,600 square feet of commercial space, and 90,605 square feet of open space is about 106,000 gpd. Since the overall project demand decreased, EBMUD concludes that the WSA approved on March 10, 2005 is still valid, and a second WSA is not required for the Sherwin-Williams Development Project. 13

The 2010 Urban Water Management Plan (UWMP) concludes that EBMUD has, and will have, adequate water supplies to serve existing and projected demand within the Ultimate Service Boundary during normal and wet years but that deficits are projected for drought years. EBMUD's Drought Management Program Guidelines establish the level of water use restrictions that EBMUD may consider based on the projected total system storage at the end of the water year. Up to a Stage 3 Drought, EBMUD-wide water use reduction goals of up to 15 percent may be required. In a Stage 4 Drought, EBMUD-wide mandatory water use reduction goals can exceed 15 percent. The Sherwin-Williams Development Project will be subject to the same drought restrictions that apply to all EBMUD customers. Please note that EBMUD updated its UWMP since the previously approved WSA, and the most current version of the UWMP should be used and referenced in the

Letter
A2
Attach.

City's revised environmental documentation. The most recent version of the UWMP can be found at http://www.ebmud.com/sites/default/files/pdfs/UWMP-2010-2011-07-21-web-small.pdf

On April 14, 2015, EBMUD declared a Stage 4 Drought and a mandatory EBMUD-wide water use reduction goal of 20 percent and adopted revised regulations regarding mandatory water use prohibitions and restrictions. This 20 percent conservation goal is consistent with the California State Governor's April 1, 2015 drought emergency order and with an April 7, 2015 California State Water Resources Control Board proposed rulemaking which specifically identifies a 20 percent water reduction goal for EBMUD. **13 cont.**

As stated in the March 10, 2005 WSA response letter, this assessment addresses the issue of water supply only and is not a guarantee of service, and future water service is subject to rates and regulations in effect at the time.

If you have any questions concerning this response, please contact Timothy R. McGowan, Senior Civil Engineer, Major Facilities Planning at (510) 287-1981.

Sincerely,

David J. Rehnstrom
Manager of Water Distribution Planning

DJR:TRM:dks
sb15_061

Attachment

EAST BAY
MUNICIPAL UTILITY DISTRICT

March 10, 2005

Miroo Desai, Senior Planner
City of Emeryville
1333 Park Avenue
Emeryville, CA 94608-3517

Dear Ms. Desai:

Re: Water Supply Assessment – Sherwin-Williams Site Redevelopment Project

This letter responds to your request of January 3, 2005 for water agency consultation concerning the Sherwin-Williams Site Redevelopment Project (Enclosure 1). The East Bay Municipal Utility District (EBMUD) appreciates the opportunity to provide this response.

Pursuant to Sections 10910-10915 (SB-610) of the California Water Code, the project meets the threshold requirement for an assessment of water supply availability based on the amount of water this project would require, which would be greater than the amount required by a 500 dwelling unit project or 250,000 square foot commercial development.

Please note that this assessment addresses the issue of water supply only and is not a guarantee of service, and future water service is subject to rates and regulations in effect at the time.

Project Demand

14

The water demands for the Sherwin-Williams Site Redevelopment Project area are accounted for in EBMUD's water demand projections as published in EBMUD's 2000 Urban Water Management Plan (UWMP/Enclosure 2). EBMUD's water demand projections account for anticipated future water demands within EBMUD's service boundaries and for variations in demand-attributed changes in development patterns. The current water demand for the existing land uses in the Sherwin-Williams Site Redevelopment Project area is about 50,000 gallons per day (gpd). The estimated water demand based on the projected water consumption supplied by the applicant for the proposed development is 110,000 gpd for the highest water use, the residential intensive development scenario, and is consistent with EBMUD's demand projections that indicate densification of these types of land uses.

Project Area

The Sherwin-Williams Site Redevelopment Project area is located in the southern portion of Emeryville. The project area consists of approximately 8.6 acres. Two development

scenarios are under consideration by the City; one includes 577 dwelling units with 35,000 square feet of commercial floor area and the other, 150 dwelling units with 291,000 square feet of commercial floor area.

EBMUD Water Demand Projections

The water consumption of EBMUD customers has remained relatively level in recent years in spite of population and account growth. Between 1987 and the present, consumption has ranged from a high of approximately 220 million gallons per day (mgd) in 1987 to a low of 170 mgd in 1989. Based on extensive forecasting in EBMUD's Water Supply Management Program (WSMP) and recent land use based demand forecasting, the WSMP forecast for 2020 water demand of 277 mgd can be reduced to 229 mgd with successful water recycling and conservation programs that are in place. The Sherwin-Williams Site Redevelopment Project will not change the EBMUD 2020 demand projection.

EBMUD Water Supply and Water Rights

EBMUD has water rights and facilities to divert up to a maximum of 325 mgd from the Mokelumne River, subject to the availability of Mokelumne River runoff and the prior water rights of other users. EBMUD's position in the hierarchy of Mokelumne River water users is determined by a variety of agreements between Mokelumne River water right holders, the appropriative water rights permits and licenses that have been issued by the State, pre-1914 rights and riparian rights. Conditions that restrict EBMUD's ability to use its 325 mgd entitlement include:

- Upstream water use by prior right holders.
- Downstream water use by riparian and senior appropriators and other downstream obligations, including protection of public trust resources.
- Drought, or less than normal rainfall for more than a year.
- Emergency outage.

During periods of drought, runoff from the Mokelumne River is insufficient to supply the 325 mgd entitlement. EBMUD studies indicate that, with its current water supply and the water demands expected in 2020, deficiencies in supply of up to 67 percent could occur during a multi-year drought period.

EBMUD UWMP

The UWMP, adopted by the Board of Directors in Resolution No. 33242-01, includes planning level analyses at the County- and EBMUD-wide levels for existing and projected water demand. A summary of EBMUD's demand and supply projections in five-year increments is provided in a table (Enclosure 3) from the UWMP. The data reflects the latest actual and forecast values.

14 cont.

EBMUD's evaluation of water supply availability accounts for the diversions of both upstream and downstream water right holders and fishery releases on the Mokelumne River. Fishery releases are based on the requirements of a 1998 Joint Settlement Agreement (JSA) between EBMUD and State and Federal wildlife agencies. The JSA requires EBMUD to make minimum flow releases from its reservoirs to the lower Mokelumne River to benefit the fishery. As this water is released downriver, it is, therefore, not available for use by EBMUD's customers.

The available supply shown in the table (Enclosure 3) in years 1, 2 and 3 of a multiple-year drought was determined by EBMUD's hydrologic model with the following assumptions:

- EBMUD Drought Planning Sequence is used for 1976, 1977 and 1978.
- Total system storage is depleted by the end of the third year of the drought.
- The diversions by Amador and Calaveras Counties upstream of Pardee Reservoir increase over time.
- Releases are made to meet the requirements of senior downstream water right holders and fishery releases are made according to the JSA.

As discussed under the Drought Management Program section in Chapter 3 of the UWMP, EBMUD's system storage generally allows it to continue serving its customers during dry-year events. EBMUD imposes rationing based on the projected storage at the end of September. By imposing rationing in the first dry year of potential drought, EBMUD attempts to minimize rationing in subsequent years if a drought persists while continuing to meet its current and subsequent-year fishery flow release requirements and obligations to downstream agencies. Table 3-1 in the UWMP summarizes the guidelines for consumer water reduction goals based on system storage.

14 cont.

In the table (Enclosure 3), "Single Dry" year (or Year 1 of "Multiple Dry Years") is determined to be a year that EBMUD would implement Drought Management Program elements at the "moderate" stage with the goal of achieving between 0 to 15 percent reduction in customer demand. Year 2 of Multiple Dry Years is determined to be a year that EBMUD would implement Drought Management Program elements at the "severe" stage with the goal of achieving between 15 to 25 percent reduction in customer demand. In Year 3 of the multiple-year drought, deficiencies from about 48 percent in year 2005 to about 67 percent in year 2020 are forecast to occur. Therefore, a supplemental supply is needed, which is defined by EBMUD as the additional amount of water necessary to limit customer deficiency to 25 percent in a multiple-year drought while continuing to meet the requirements of senior downstream water right holders and the provisions of the 1998 JSA.

Supplemental Water Supply and Demand Management

The goals of meeting projected water needs and increased water reliability rely on three components: supplemental supply, water conservation and recycled water.

Chapter 2 of the UWMP describes EBMUD's supplemental water supply project alternatives to meet its long-term water demand. To address the need for a supplemental water supply during droughts, EBMUD signed a contract in 1970 with the Federal government for a supplemental supply from the Central Valley Project (CVP). In 2001, EBMUD certified the environmental documentation amending its CVP contract 14-06-200-5183A, reducing EBMUD's contract from 150,000 acre-feet (AF)/year to an entitlement not to exceed 133,000 AF in any one year or 165,000 AF over any 3 consecutive years. In 2001, EBMUD signed a Memorandum of Agreement with the City of Sacramento, the County of Sacramento and the U.S. Bureau of Reclamation to study a joint regional water project on the Sacramento River near Freeport. The Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) of the Freeport Regional Water Project identifies several regulatory permits and approvals required for the implementation of the project alternatives. These are listed in Table 2-6 of the Freeport Regional Water Project Draft EIR/EIS, July 2003 and incorporated in the Final EIR/EIS for the project which was certified in April 2004.

14 cont.

Chapter 2 of the UWMP also describes other supplemental water projects, including the development of groundwater storage within EBMUD's service area. EBMUD is studying the environmental impacts of these proposed projects. Specific capital outlay and financing information for these projects are included in EBMUD's FY04-05 Capital Improvement Program and Five-Year Plan. The Freeport project would also allow for a future groundwater conjunctive use component and, along with the proposed local groundwater projects, emergency interties and planned water recycling and conservation efforts, would ensure a reliable water supply to meet projected demands for current and future EBMUD customers within the current service area. Without a supplemental water supply source, continued conservation efforts and further use of recycled water, deficiencies in supply are projected as noted above.

The Sherwin-Williams Site Redevelopment Project presents an opportunity to incorporate many water conservation measures. Conditions of approval for the implementation of the Sherwin-Williams Site Redevelopment Project should require that the project comply with the Landscape Water Conservation Section of the Municipal Code of the City Article 9-4.54 of Chapter 4 of Title 9. EBMUD staff would appreciate the opportunity to meet with the project sponsor to discuss water conservation programs and best management practices applicable to the proposed project. A key objective of this discussion will be to explore timely opportunities to expand water conservation via early consideration of EBMUD's conservation programs and best management practices applicable to the project.

Letter
A2
Attach.

The Sherwin-Williams Site Redevelopment Project area is located within the service area boundary of EBMUD's East Bayshore Recycled Water Project. EBMUD anticipates recycled water delivery to the project area within the next ten years and will coordinate closely with the project sponsor regarding installation of dual plumbing for use of recycled water where feasible. **14 cont.**

The project sponsor should contact David J. Rehnstrom, Senior Civil Engineer, at (510) 287-1365 for further information.

Sincerely,

WILLIAM R. KIRKPATRICK
Manager of Water Distribution Planning Division

WRK:JLM:sb
sb05_015n.doc

Enclosures: 1. Letter of Request for Water Supply Assessment dated January 3, 2005
2. EBMUD's 2000 Urban Water Management Plan Area
3. EBMUD's Projected Demand and Available Supply Table

cc: Board of Directors w/o Enclosure 2

Letter
A2
Attach.

CITY OF EMERYVILLE
INCORPORATED 1896
1333 PARK AVENUE
EMERYVILLE, CALIFORNIA 94608-3517
TEL: (510) 596-4300 FAX: (510) 596-8095

RECEIVED
JAN 04 2005
WATER SERVICE PLANNING

January 3, 2005

Mr. Dave Rehnstrom, Senior Civil Engineer
East Bay Municipal Utility District
Distribution Planning Department Mail Stop 701
375 11th Street
Oakland, CA 94607

Subject: Water Supply Assessment request for Sherwin-Williams Emeryville Site Redevelopment

Dear Mr. Rehnstrom:

The City of Emeryville is currently preparing an Environmental Impact Report (EIR) for the proposed Sherwin-Williams Emeryville Site Redevelopment. The project site is located at 1450 Sherwin Avenue in Emeryville and is the current location of an 8.59 acre paint factory facility. The site is currently undergoing remediation for soil and groundwater contamination due to prior industrial uses. The proposed project includes the demolition of the paint factory and the construction of a maximum of 577 housing units and 35,000 square feet of commercial space under one scenario, or 150 housing units and 291,000 square feet of commercial space under another scenario. The final development program will likely be some combination of these scenarios, but within these parameters.

15

With this letter we are submitting a Water Supply Assessment (WSA) request for the Sherwin Williams redevelopment project in accordance with Section 15083.5 of the 2004 *California Environmental Quality Act Guidelines*, which requires consultation with the appropriate water agency for projects that include commercial building construction that would compromise either 500 residential dwelling units or a mixed use project that would demand an equal, or greater amount of water needed to serve a 500-dwelling unit project, and would require a General Plan Amendment. A copy of the Notice of Preparation of the Draft EIR, which was sent to EBMUD on December 17, is attached for your reference.

Letter
A2
Attach.

The City of Emeryville requests that the EBMUD provide the necessary WSA to verify that EBMUD water supplies are sufficient for the project and to determine if the proposed increase in water consumption would require new or expanded water supply facilities.

15 cont.

If you have any questions, please do not hesitate to contact me at 510/596-3785 or email me at mdesai@ci.emeryville.ca.us. Thank you for your assistance.

Sincerely,

Miroo Desai
Senior Planner
City of Emeryville

cc: Jason Burke, LSA Associates, Inc.

Attachment: Notice of Preparation

Letter
A2
Attach.

Enclosure 3

PROJECTED DEMAND AND AVAILABLE SUPPLY
EAST BAY MUNICIPAL UTILITY DISTRICT
(million gallons per day - mgd)

	2000	2005	2010	2015	2020
Customer Demand[1]	230	242	257	267	277
Adjusted for Conservation[2]	(8)	(14)	(20)	(27)	(34)
Adjusted for Recycled Water[3]	(6)	(9)	(11)	(12)	(14)
Planning Level of Demand	216	219	226	228	229
Available Supply & Need for Supplemental Supply					
Normal Year	>216	>219	>226	>228	>229
Supplemental Supply Need	*0*	*0*	*0*	*0*	*0*
Single Dry Year (Multiple Dry Years - Year 1) Moderate Stage (approximately 7% deficiency)[4]	200	203	210	212	213
Supplemental Supply Need	*0*	*0*	*0*	*0*	*0*
Multiple Dry Years - Year 2 Severe Stage (approximately 25% deficiency)[4]	162	164	169	171	172
Supplemental Supply Need	*0*	*0*	*0*	*0*	*0*
Multiple Dry Years - Year 3					
Available Supply	125	114	95	84	77
Deficiency	42%	48%	58%	64%	67%
Supplemental Supply Need[5] (to limit deficiency to 25%)	*87*	*102*	*128*	*142*	*154*

1. *Demand taken from the 2000 Demand Study.*
2. *Conservation water savings goals from the WCMP 1999 Annual Report, 2 mgd in 1999 and 34 mgd for year 2020, linearly interpolated into five-year increments.*
3. *Chapter 5 of UWMP.*
   Note: Conservation and Reclamation savings reported are those attributed to programs which are a part of the 1993 WSMP. Reference Chapter 6 of UWMP.
4. *Drought conditions per Table 3-1, UWMP.*
5. *The supplemental supply need is calculated from modeling studies and is the amount of water needed to limit customer deficiency to 25 percent and to implement all provisions of the 1998 Joint Settlement Agreement.*

15 cont.

COMMENTER A2

East Bay Municipal Utility District (EBMUD)
David Rehnstrom
February 29, 2016

Response A2-1: This comment is introductory in nature, and does not raise concerns regarding the environmental analysis or information contained within the Draft EIR. Please see Responses A2-4 through A2-15, which respond to concerns the commenter raised within this letter.

Response A2-2: EBMUD's comments on the Revised Notice of Preparation are included in Appendix A of the Draft EIR and were considered and taken into account during preparation of the Draft EIR. The EIR authors noted in particular that EBMUD considered the Water Service Assessment (WSA) prepared on January 5, 2005 still valid for the revised project.

Response A2-3: This comment is introductory in nature for the January 13, 2015 letter, and does not raise concerns regarding the environmental analysis or information contained within the Draft EIR. Please see Responses A2-4 through A2-15 which respond to concerns the commenter raised within this letter.

Response A2-4: The provision of water services and demand associated with the proposed project was evaluated in the Draft EIR Section IV.L, Utilities and Infrastructure. As described on page 371 of the Draft EIR, the City submitted a written request to EBMUD in March 2015 for an updated Water Supply Assessment for the proposed project. EBMUD responded in a letter dated May 13, 2015 (Enclosure B to the comment letter) which stated the following:

"The estimated demand for the Sherwin-Williams Emeryville Site Redevelopment Project consisting of 577 dwelling units and 35,000 square feet of commercial space in the approved WSA was about 110,000 gallons per day (gdp). Since the overall project demand decreased, EBMUD concludes that the WSA approved on March 10, 2005 is still valid, and a second WSA is not required for the Sherwin-Williams Development Project."

Response A2-5: The provision of water services and demand associated with the proposed project was evaluated in the Draft EIR Section IV.L, Utilities and Infrastructure, and no significant unavoidable impacts were identified. The anticipated growth that would result from the proposed project is consistent with EBMUD's Urban Water Management Plan.

As described on page 372, the capacity of existing water mains to accommodate increased demand generated by the proposed project would be evaluated prior to approval of final construction plans. If line improvements are required, upgrades would be made by the project applicant in coordination with the City and EBMUD prior to project construction. Increased water deliveries to the project site would not require additional storage or pumping capacity or require substantial modifications to the existing water lines located within the project site. As such the proposed project would have a less-than-significant impact on water distribution infrastructure.

Response A2-6: The topic of hazardous materials and water quality was evaluated in the Draft EIR Section IV. H, Hydrology and Water Quality and Section IV.I, Hazards and Hazardous Materials. As discussed on pages 315 through 319 of the Draft EIR, soil and groundwater beneath the project site have been impacted with hazardous materials due to historic industrial uses of the project site, and additional impacts in groundwater may be present beneath the project site due to migration of impacted groundwater from up-gradient and off-site sources. Although remediation activities at the project site resulted in removal of soil impacted with hazardous materials to an extent that remedial cleanup goals were achieved at the Sherwin-Williams parcel, soil impacted with concentrations of hazardous materials exceeding cleanup goals remains at the Successor Agency parcel. In addition, residual impacts from hazardous materials remain in groundwater and soil gas beneath the Sherwin-Williams parcel and possibly beneath the Successor Agency parcel, and previously unidentified areas of hazardous materials impacted soil and groundwater could be discovered during site redevelopment. Compliance with DTSC requirements and the implementation of Mitigation Measures HAZ-2a, HAZ-2b, HAZ-2c, and HAZ-2 would ensure that potential significant hazards associated with the disturbance of soil and groundwater at the project site would be less than significant. See also <aster Response 3 and responses to comment letter A4 from the Department of Toxic Substances Control (DTSC).

Response A2-7: As described in Chapter III, Project Description, the project site has been subject to remedial actions to address contamination due to prior land uses. The Water Board provided oversight for the Sherwin-Williams parcel investigation and remediation activities until early 2006, when the DTSC assumed responsibility for oversight.

The Sherwin-Williams parcel has been remediated pursuant to the June 2010 RAP developed in accordance with Health and Safety Code, Division 20, Chapter 6.8 under oversight of DTSC. The RAP was based on the Remedial Investigation, the Human Health Risk Assessment (HHRA) (approved by the Water Board in December 2005) and the Feasibility Study conducted for the Sherwin-Williams parcel. Following the DTSC's approval of the RAP, and a Mitigated Negative Declaration prepared for the RAP, a Remedial Design

Implementation Plan (RDIP) was prepared and approved by DTSC on June 30, 2011. The remedy completion and RDIP modifications were documented in the Remedy Implementation Completion Report (RICR) approved by DTSC on August 7, 2012.

Remedial activities included excavation and offsite disposal of unsaturated and saturated soil containing arsenic, lead, and volatile organic compounds (VOCs) including benzene, toluene, and xylenes at concentrations above unrestricted cleanup goals, and installation of remedial features including: retention of the existing slurry wall that was installed in 1994; extension of the slurry wall; breaches in three locations in the slurry wall to provide for specific groundwater flow channels; installation of a low permeability vertical barrier and high permeability channel to direct groundwater flow; placement of low permeability soil backfill to minimize water infiltration, and installation of groundwater monitoring wells. The GWET system, originally installed as part of the IRMs, was shut down and removed in 2011 as part of the final remedy implementation. Remediation activities included in the RAP are shown in Figure III-3.

A “no further action” letter was issued by the DTSC on January 23, 2013. Groundwater monitoring continues under the direction of the DTSC.

A variety of materials such as petroleum products and metals related to the industrial operations at the Successor Agency parcel and at nearby properties were found in the soil and groundwater in concentrations that required cleanup before the property could be redeveloped. A non-time critical cleanup was funded partially under a United States Environmental Protection Agency (U.S. EPA) Brownfields cleanup grant, the former Emeryville Redevelopment Agency (Redevelopment Agency), and the UPRR. The Redevelopment Agency served as the Lead Agency under a Memorandum of Understanding with the DTSC and the Water Board.

A soil and groundwater investigation at the Successor Agency parcel was conducted in October 2006, and the results are presented in the Analysis of Brownfields Cleanup Alternatives (ABCA) dated November 27, 2007.

The most significant contaminants at the Successor Agency parcel included metals (arsenic, cadmium, lead, and zinc) and petroleum hydrocarbons in the soil and arsenic in groundwater. Metals contaminated soil was found across much of the Successor Agency parcel, except for the eastern portion of what is now known as Sherwin Avenue, in primarily fill soils near the surface. Petroleum hydrocarbons are found primarily in the southwest corner of the Successor Agency parcel. Arsenic in groundwater is likely the result of releases from the up gradient and adjacent Sherwin-Williams parcel.

The cleanup objective for the Successor Agency parcel was to reduce the volume, toxicity, and mobility of contaminants of concern to acceptable, risk-based levels for relatively unrestricted land use for any development that may be contemplated.

The Redevelopment Agency evaluated a range of methods for addressing the contaminants of concern at the Successor Agency parcel, and the results of that analysis are presented in the ABCA. The cleanup alternative recommended in the ABCA and selected in the Site Cleanup Plan (SCP) dated January 2008 (see information below for document availability) included excavation of soils where contamination levels exceeded the cleanup goals and transportation and disposal of excavated soil to off-site permitted disposal facilities.

The Successor Agency parcel was remediated in 2008 under oversight of the DTSC and Water Board and the property has not been restricted for development of any land use. See also responses to comment letter A4 from the Department of Toxic Substances Control (DTSC).

Response A2-8: Wastewater service and storm drainage system capacity associated with the proposed project was evaluated in the Draft EIR Section IV.L, Utilities and Infrastructure and Section IV.H, Hydrology and Water Quality. As discussed on page 292 of the Draft EIR, a significant impact would result from implementation of the proposed project as it could create or contribute runoff water which could exceed the capacity of existing or planned stormwater drainage system. With implementation of Mitigation Measure HYD-2, potential impacts associated with peak runoff volumes would be reduced to a less-than-significant level. In addition, as discussed on page 373, the applicant is required to incorporate Low Impact Development (LID) measures for storm drainage facilities on the project site to comply with the City's stormwater ordinance and the Municipal Regional Permit requirements issued by the San Francisco Regional Water Quality Control Board.

Response A2-9: Please see Response A2-8. With implementation of HYD-2, potential impacts associated with peak runoff volumes would be reduced to a less-than-significant level. The City will also require the project applicant to comply with EBMUD's Regional Private Sewer Lateral Ordinance and all other requirements to ensure that new wastewater collection systems are constructed to prevent excessive infiltration and inflow (I/I) on the project site.

Response A2-10: The City will require the project applicant to comply with EBMUD's Regional Private Sewer Lateral Ordinance and all other requirements to ensure that new wastewater collection systems are constructed to prevent excessive infiltration and inflow (I/I) on the project site.

In response to this comment, page 373 of the Draft EIR would be revised as follows:

> The project applicant must comply with EBMUD's Regional Private Sewer Lateral Ordinance. In addition, the project applicant must replace or rehabilitate any existing sanitary sewer collection systems, including sewer lateral lines to ensure that such systems are lines are free from defects or, alternatively, disconnected from sanitary sewer system. The project applicant must ensure that any new wastewater collection systems including sewer lateral lines, for the project are constructed to prevent infiltration and inflow (I/I) to the maximum extent feasible while meeting all requirements contained in the Regional Private Sewer Lateral Ordinance and applicable municipal codes or Satellite Agency ordinances.

Response A2-11: The topic of recycled water is discussed on page 364 of the Draft EIR. In addition, as described in the Draft EIR Chapter III, Project Description, all landscaping would be irrigated and plumbed with purple pipes for the use of recycled water. The project proposed to extend a new four-inch recycled through the new 46th Street from the existing 8-inch recycled water main on Horton Street.

Page 364 of the Draft EIR would be revised to include the following revision as the third paragraph:

> The project applicant shall continue to coordinate with the City and EBMUD as they implement the various components of the proposed project regarding providing recycled water for appropriate non-potable uses. In addition, the project applicant will be responsible for the extension of recycled water pipelines to the proposed development and within the development.

Response A2-12: Water conservation practices are identified in Draft EIR Section IV. L, Utilities and Infrastructure, and no significant unavoidable impacts associated with the provision of water were identified. As described in the Draft EIR on page 372, the proposed project would be outfitted with water-conserving fixtures, as required by the Uniform Building Code. All landscaping would be irrigated and plumbed with purple pies for the use of recycled water. In addition, landscaping will comply with the Bay-Friendly Landscape practices outlined in Emeryville Municipal Code Section 9-4.6.

Response A2-13: This comment is a letter sent by EBMUD to the City of Emeryville dated May 13, 2015 regarding reconfirmation that the Water Supply Assessment for the revised Sherwin-Williams Development Project is still valid. This letter does not raise concerns regarding the environmental analysis or information contained within the Draft EIR.

Response A2-14: This comment is a letter sent by EBMUD to the City of Emeryville dated March 10, 2005 regarding the Water Supply Assessment for the Sherwin-Williams Site Redevelopment Project. This letter does not raise concerns regarding the environmental analysis or information contained within the Draft EIR.

Response A2-15: This comment is a letter sent by EBMUD to the City of Emeryville dated January 3, 2005 regarding the Water Supply Assessment Request for the Sherwin-Williams Site Redevelopment Project. This letter does not raise concerns regarding the environmental analysis or information contained within the Draft EIR.

Letter
A3

ALAMEDA
County Transportation Commission
1111 Broadway, Suite 800, Oakland, CA 94607 • 510.208.7400 • www.AlamedaCTC.org

March 4, 2016

Miroo Desai
Senior Planner
City of Emeryville
1333 Park Avenue
Emeryille, CA 94608

SUBJECT: Response to Draft Environmental Impact Report (DEIR) for City of Emeryville's Sherwin-Williams Development Project

Dear Ms. Desai,

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Sherwin-Williams Development Project. The project site consists of approximately 10.05 acres bounded by Horton Street to the east, Sherwin Avenue to the south, and Union Pacific Railroad tracks to the west. The site currently contains a 74,000 square feet office building. The proposed project would divide the site into six new parcels, roadways, and a park area. At buildout, the project would include a total of 649,000 square feet of residential space (540 units) and 94,600 square feet of commercial space. The project would also include park and open space, including a children's playground and adult fitness space, and a central green within the Hubbard Circle. 1

The Alameda County Transportation Commission (Alameda CTC) respectfully submits the following comments:

- The Alameda CTC's CMP requires that the DEIR address potential impacts to not only roadways on the Metropolitan Transportation System (MTS) network, but also potential impacts of the project on MTS transit operators (AC Transit in this case), Countywide Bicycle Network, and Pedestrian Areas of Countywide Significance. The following revisions should be made to the DEIR to reflect the multimodal nature of the CMP requirements: 2
  - The language in the following pages should incorporate the multimodal nature of Alameda CTC's CMP requirement:
    - Appendix B – Transportation Impact Analysis (TIA): pages 6, 12, and 14, and Chapter 7.
  - Appendix B – Chapter 7 should include a multimodal project impacts analysis. Specifically:
    - Transit impacts to consider include the effects of project vehicle traffic on mixed flow transit operations, transit capacity, transit access/egress, need for future transit service, and consistency with adopted plans. See Appendix K of the 2015 CMP document for more details. 3
    - Bicycle related impacts to consider include effects of vehicle traffic on bicyclist conditions, site development and roadway improvements, and consistency with adopted plans. See Appendix K of the 2015 CMP document for more details. 4

Letter
A3
Cont.

- Pedestrian related impacts to consider include effects of vehicle traffic on pedestrian conditions, site development and roadway improvements, and consistency with adopted plans. See Appendix K of the 2015 CMP document for more details. **5**

- The TIA indicated that the trip distribution of vehicles to and from the project site were developed based on the location of complementary land uses and existing travel patterns in the area (See Appendix B – TIA: page 40). Please indicate any survey or data sources used for the trip distribution calculation. **6**
- Alameda CTC notes that the TIA has included a VMT assessment in line with the pending update of the California Environmental Quality Act (CEQA) guidelines by the Office of Planning and Research (OPR) (See Appendix B – TIA: Chapter 4). Alameda CTC has not set thresholds for a VMT assessment and is also closely monitoring the development of the CEQA guidelines update. Our comments regarding the VMT assessment are: **7**
  - Appendix B – TIA: page 49: The VMT assessment converted square feet of development to number of employees to model project land use. Please provide the source of these conversion factors.
- To calculate volume-to-capacity (V/C) ratios, the DEIR provided per-lane capacity assumptions (Appendix B – TIA: page 110) of 2,000 vehicles per hour for freeway segments, 800 vehicles per hour for surface streets. The report should provide a source for these assumptions. **8**
- The DEIR indicated that the Alameda CTC travel model was applied on the MTS roadway segments analysis to analyze the impacts of the proposed project on the regional network in 2025 and 2040. The current Alameda CTC model simulates travel demand for the forecast years 2020 and 2040. The DEIR should explain how 2025 traffic condition was estimated based on the Alameda CTC travel model. **9**

Thank you for the opportunity to comment on this DEIR. Please contact me at (510) 208-7428 or Daniel Wu of my staff at (510) 208-7453 if you have any questions.

Sincerely,

Tess Lengyel
Deputy Director of Planning and Policy

cc: Daniel Wu, Assistant Transportation Planner
file: CMP/Environmental Review Opinions/2016

COMMENTER A3

Alameda County Transportation Commission
Tess Lengyel
March 4, 2016

Response A3-1: This comment is introductory in nature, and does not raise concerns regarding the environmental analysis or information contained within the Draft EIR. Please see Responses A3-2 through A3-9 which respond to concerns the commenter raised within this letter.

Response A3-2: Significance criteria for transit operations, bicycle, and pedestrians are discussed starting on page 115 of the Draft EIR. Project impacts to these modes of travel were identified based on the significance criteria, and as noted in the comment, impacts and mitigation measures were developed. The commenter is correct in noting that the Countywide Bicycle Network and Pedestrian Areas of Countywide Significance were not specifically mentioned in the Draft EIR. However, the potential impact to these modes were discussed and analyzed as part of the Draft EIR as well as throughout the Transportation Impact Analysis in Appendix B of the Draft EIR (see, e.g., the TIA at pages ii-iii, 17-27, 70-73, 104-106, 118-122). Mitigation measures that incorporate the intent of the multimodal nature of the CMP requirements were identified.

The level of transit trip generation was also estimated for the project as presented in the Transportation Assessment. The project is expected to generate approximately 70 morning peak hour and 80 evening peak hour transit trips. Of these trips, most would include a bus component, with some including a bus and BART component. Between AC Transit and Emery-go-Round service, there are approximately 29 buses that serve the project area during the morning and evening peak hours, resulting in less than 5 additional riders per any bus in the area. Of the total transit trips, a percentage may use the BART system. Even if all estimated transit trips used the BART system, the MacArthur BART station is served by three lines, each running 10 car trains on less than 10 minute to 15-minute headways during peak periods; as the project would add fewer than 1 passenger per car during peak hours, a less-than-substantial increase to BART ridership is expected.

Response A3-3: Please see Response A3-2 regarding transit impacts.

Response A3-4: Please see Response A3-2 regarding bicycle impacts.

Response A3-5: Please see Response A3-2 regarding pedestrian impacts.

Response A3-6: Existing traffic volumes are shown on Figure 9 of the TIA. Aerial maps and the City's General Plan Land Use Diagram were also consulted. A select zone analysis using the Alameda CTC model was also conducted. In this instance, the proposed project uses were added to the travel analysis zone that includes the project and the origin/destination of those trips within the model was tracked.

Response A3-7: The transportation model that was used to estimate vehicle miles of travel for the proposed project uses dwelling units and number of employees by employment type as land use inputs. General conversion factors are often used to convert a development by square foot to an associated number of employees. These factors are often developed for use in fiscal assessments to estimate the level of employment within a project, and can also be correlated by reviewing the Institute of Transportation Engineer Trip Generation Manual rates when data is presented based on both square feet and employees.

For this project, a conversion factor of approximately 1 employee per 250 square feet was used for the office and restaurant components of the project site, and 1 employee per 500 square feet was used for the retail use component. These factors were developed in consultation with the City of Emeryville and are similar to employee factors used in the City for other purposes.

Response A3-8: The basis of the per-hour per-lane capacities noted above is the Highway Capacity Manual. This methodology is consistent with the approach used for other projects in Emeryville and other communities within Alameda County. These capacities do not reflect additional capacity provided at intersections through turn pockets.

Response A3-9: The commenter is correct in stating that the Alameda CTC model simulates travel demand for the forecast years of 2020 and 2040. The year 2025 was incorrectly cited as a model forecast year in the Draft EIR. The error was typographical; no changes to the impact analysis are necessary.

In response to this comment, page 174 of the Draft EIR would be revised as follows:

> **Traffic Forecasts.** Fehr & Peers used the Alameda Countywide Travel Demand Model to forecast 2020 ~~2025~~ and 2040 traffic volumes on the MTS roadway system. The forecasts for the MTS system differ from the intersection forecasts previously discussed in the following aspects:
>
> - The regional model does not include some minor streets in Emeryville, potentially overstating traffic volumes on the roadways included in the model.

- The MTS roadway analysis reports the outputs of the Alameda CTC model directly on a roadway segment level.

The results of the Alameda CTC model were used to forecast the No Project Conditions for 2020 ~~2025~~ and 2040. To identify potential impacts associated with the project, project trips were distributed to the MTS roadway segments (including freeways and surface streets) identified above using the project trip distribution described above. The distribution of project trips onto the MTS segments results in the project volumes for 2020 ~~2025~~ and 2040 shown in Tables IV.C-22 and IV.C-23.

Analysis Method. Operations of the MTS freeway and surface street segments were assessed based on volume-to-capacity (V/C) ratios. For freeway segments, a per-lane capacity of 2,000 vehicles per hour was used. For surface streets, a per-lane capacity of 800 vehicles per hour was used. These capacities do not reflect additional capacity provided at intersections through turn pockets. Roadway segments with a V/C ratio greater than 1.0 are assigned LOS F.

Analysis Results. The MTS PM peak hour roadway segment analyses are provided in Table IV.C-22 for the 2020 ~~2025~~ condition and Table IV.C-23 for the 2040 condition. Results of the analysis indicate that the proposed project would not result in or worsen deficient operations on the MTS roadway segments included in this assessment. Therefore, the impact to the MTS roadway system is less-than-significant.

On page 175 the title of Table IV.C-25 in the Draft EIR would be revised as follows:

Table IV.C-25: 2020 ~~2025~~ PM Peak Hour CMP Roadway Segment Analysis

Letter
A4

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Barbara A. Lee, Director
700 Heinz Avenue
Berkeley, California 94710-2721

Edmund G. Brown Jr.
Governor

March 7, 2016

Ms. Miroo Desai (via email to: mdesai@ci.emeryville.ca.us)
City of Emeryville
1333 Park Avenue
Emeryville, California 94608

Dear Ms. Desai:

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the Sherwin Williams Development Project (Project) SCH# 2004122083. The Project proposes mixed-used residential (540 units) and commercial (94,600 square feet) redevelopment of a 10.05-acre site located in the City of Emeryville, Alameda County, California.

As you may be aware, the California Department of Toxic Substances Control (DTSC) oversees the cleanup of sites where hazardous substances have been released pursuant to the California Health and Safety Code, Division 20, Chapter 6.8. As a Responsible Agency, DTSC is submitting comments to ensure that the environmental documentation prepared for this project under the California Environmental Quality Act (CEQA) adequately addresses activities pertaining to releases of hazardous substances. DTSC provides the following questions and comments: 1

- TABLE II-1
  - GEO Mitigations – These mitigations should explicitly mention that these mitigations must take into account the existing remedial system. This system was designed to ensure a specific flow of groundwater under the site. The direction and speed of flow cannot be altered without DTSC approval. 2
  - HYD Mitigations – These mitigations should explicitly mention that these mitigations must take into account the existing remedial system. This system was designed to ensure a specific flow of groundwater under the site. The direction and speed of flow cannot be altered without DTSC approval. 3
  - HAZ-2 Mitigations – These mitigations should include provisions for actions if contaminated soil is found during earthwork activities, according to a DTSC-approved Soil Management Plan. Additionally, documentation must be provided to DTSC to confirm that imported fill materials are clean. 4

Printed on Recycled Paper

Letter
A4
Cont.

- HAZ-2a/b – Future evaluations of soil gas conditions and indoor air quality will be based on previous soil gas investigations conducted and reported during 2006-2007 and 2012-2013. DTSC will not require a complete reassessment of soil vapor throughout the site.

- HAZ-2b – Prior to any review of documentation relating to the parcel owned by the Successor Agency, DTSC will require that a reimbursement agreement be signed to fund DTSC's oversight. 4 cont.

- HAZ-2c – Prior to any review of documentation relating to the parcel owned by the Successor Agency, DTSC will require that a reimbursement agreement be signed to fund DTSC's oversight. In addition, what is the basis for the requirement for an LUC? Generally a soil management plan does not address import of soils from offsite.

- Page 39 – Please replace the reference to the "no further action" letter and footnote 8 with reference and footnote to "Certificate of Completion" issued by DTSC on January 23, 2013. 5

- Page 40 - Remediation of Successor Agency Parcel – This parcel was not remediated under the oversight of DTSC and RWQCB. DTSC and RWQCB were consulted by the City of Emeryville when the cleanup plan was developed and may have provided concurrence on the cleanup plan, but did not provide any field oversight and have not reviewed any documents related to the actual remediation of the site. 6

- Page 41 – It would be more correct to use the figure from the Land Use Covenant which shows the remedial features currently at the site, not where contaminated material was removed. 7

- Page 63 – Excavation for mass grading could pose a potential for exposure to groundwater during construction, depending on the season, location, and depth of excavation. If dewatering is planned, a Groundwater Management Plan must be reviewed and approved by DTSC. 8

- Page 64 - Table III-4 – Required approvals must include DTSC approval of a Soil Management Plan, a Groundwater Management Plan, and any future soil vapor investigations. Additionally, future plans for removal of the transformer and the former underground storage tank which was abandoned in place (as documented in the site's Remedy Implementation Completion Report dated July 25, 2012 and approved by DTSC letter dated August 6, 2012) must be reviewed and approved DTSC. 9

- Page 70 – Where did the soil stockpiles come from on the City Parcel? What documentation is available regarding the chemical constituents in the soil piles? 10

Letter
A4
Cont.

- Page 279 - Impact GEO-2b – It is unclear how this addresses the existing remedial features. If piles are used they must be designed to not impact the existing slurry wall and must not impede, redirect or increase flow of groundwater at the site. **11**

- Page 287 – The following statement is not correct: "Based on groundwater elevations, the groundwater flow direction at the time of monitoring was toward the northwest toward Temescal Creek. This groundwater flow direction is consistent with the topography of the project site." Groundwater flows in two different directions at the site. In the southern portion of the property the groundwater flows to the southwest. **12**

- Page 296 – Please provide documentation regarding the soil piles which are at the site. Identify where soil came from and available sampling data which confirms that it is clean. **13**

- Page 301 – Please provide documentation regarding the remedial activities which were undertaken. Please include sample results documenting the contamination which was left in place. **14**

- Page 315-316 - Vapor Intrusion – Future evaluations of soil gas conditions and indoor air quality will be based on previous soil gas investigations conducted and reported during 2006-2007 and 2012-2013. A reassessment of the entire property is not planned. **15**

- Page 318-319 - Mitigation Measure HAZ-2d – This mitigation should be included in Table II-1. **16**

- Page 319 – The SMP must be reviewed and approved by DTSC (please fix typo, "DSTC") prior to disturbing soil or groundwater at the Sherwin Williams site. **17**

- FIGURES III-4,5 – Land Use Diagrams, Option A/B – The footprint for Parcel D appears to overlap significant portions of the high-permeability backfill area, an integral part of remedial features. Design of structural slabs, foundations, or footings must not impede groundwater flow through remedial features. **18**

- FIGURES VI-1a,1b,1c - Reduced Density Alternatives – The footprints for buildings Residential A5 (in Figures VI-1a,1b) and Residential A4 (in Figure VI-1c) appear to overlap significant portions of the high-permeability backfill area, an integral part of remedial features. Design of structural slabs, foundations, or footings must not impede groundwater flow through remedial features. **19**

- FIGURES VI-2a,2b - Lennar Alternatives – The footprints for Building D appear to minimally intersect the high-permeability backfill area (though it is unclear whether this is accurate due to the scaling of the figure), an integral part of **20**

Letter
A4
Cont.

remedial features. Design of structural slabs, foundations, or footings must not impede groundwater flow through remedial features. **20 cont.**

If you have any questions, please contact the site project manager, Elena Joy Pelen, via email or phone at ElenaJoy.Pelen@dtsc.ca.gov or (510) 540-3798.

Thank you in advance for your cooperation in this matter.

Sincerely,

Karen M. Toth, P.E., Unit Chief
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

COMMENTER A4

Department of Toxic Substances Control
Karen Toth
March 7, 2016

Response A4-1: This comment provides an introduction to DTSC's comment letter, indicating that DTSC oversees the cleanup of sites where hazardous substances have been released pursuant to California Health and Safety Code, Division 20, Chapter 6.8, and that DTSC is providing questions and comments as a responsible agency. This comment does not require a response.

Response A4-2: The commenter indicates that geology and soils mitigation measures should explicitly state that that these mitigations take into account the existing remedial system and that any measures that could affect the direction and velocity of groundwater flow must be approved by the DTSC.

In response to the comment, page 278 of the Draft EIR and Mitigation Measure GEO-1 is revised as follows:

> (e) All foundation designs and geotechnical remedies shall consider existing hazardous materials remediation systems and ensure that these remediation systems are not adversely affected. Any geotechnical remedies that could result in alteration of the direction or flow velocity of groundwater shall be approved by the DTSC prior to implementation.

Response A4-3: The commenter indicates that hydrology and water quality mitigation measures should explicitly state that that these mitigations take into account the existing remedial system and that any measures that could affect the direction and velocity of groundwater flow must be approved by the DTSC.

In response to the comment, the following text is added to the end of Mitigation Measure HYD-1b in the Draft EIR on page 291 as follows:

> 6. All stormwater treatment measures shall consider existing hazardous materials remediation systems and ensure that these remediation systems are not adversely affected.
>
> 7. Any stormwater treatment measures that could result in alteration of the direction or flow velocity of groundwater shall be approved by the DTSC prior to implementation.

Response A4-4: The commenter indicates that HAZ-2 mitigation measures should include provision for actions if contaminated soil is found during earthwork activities, according to a DTSC-approved Soil Management Plan (SMP), and that documentation must be provided to DTSC to confirm that imported fill materials are not contaminated. Regarding Mitigation Measures HAZ-2a and HAZ-2b, the commenter indicates that future evaluations of soil gas conditions and indoor air quality will be based on previous soil gas investigations conducted and reported during 2006-2007 and 2012-2013, and that DTSC will not require a complete reassessment of soil vapor throughout the site. Regarding Mitigation Measures HAZ-2b and HAZ-2c, the commenter indicates that prior to any review of documentation relating to the parcel owned by the Successor Agency, DTSC will require that a reimbursement agreement be signed to fund DTSC's oversight. The commenter also asks for an explanation of the basis for the requirement of a Land Use Covenant (LUC), and indicates that generally soil management plans do not address import of soils from offsite. Regarding revisions to Mitigation Measures HAZ-2a and HAZ-2b see Master Response 3.

As presented on page 304 of the Draft EIR, DTSC stated that they could not concur with the No Further Action letter for the Successor Agency parcel if concentrations remain above residential levels without a deed restriction, and a preliminary draft deed restriction was prepared by the City in 2010. In November 2015, the City initiated preparation of an exhibit showing those areas of the Successor Agency parcel that were not remediated in order to finalize a LUC for the Successor Agency parcel. The exhibit and draft deed restriction would be submitted to DTSC for review and incorporation into a LUC after the City signs a reimbursement agreement to fund DTSC's oversight. It is understood that in order for DTSC to provide oversight of the preparation of a LUC and SMP, as required by Mitigation Measure HAZ-2c, the City needs to sign a reimbursement agreement to fund DTSC's oversight prior to requesting their review of documentation relating to the Successor Agency parcel.

Response A4-5: The commenter requests that the reference to the "no further action" letter be replaced with reference to a "Certificate of Completion" issued by DTSC on January 23, 2013. This change does not require a change in the analyses or mitigation measures identified for the project in regards to project impacts associated with hazardous materials. In response to the comment, the second full paragraph on Draft EIR page 39 has been modified as follows:

> A ~~"no further action"~~ "Certificate of Completion" letter was issued by the DTSC on January 23, 2013.[8] Groundwater monitoring continues under the direction of the DTSC.

Response A4-6: The commenter indicates that the Successor Agency Parcel was not remediated under the oversight of DTSC and RWQCB, but that the DTSC and RWQCB were consulted by the City when the cleanup plan was developed and did not provide field oversight and have not reviewed any documents related to the actual remediation of the site.

In response to the comment, the last paragraph of Section 2.d of the Draft EIR (page 40) has been revised to read as follows:

> The Successor Agency parcel was remediated in 2008 ~~under oversight of~~ in accordance with the DTSC and Water Board approved SCP ~~and the property has not been restricted for development of any land use~~. Following the completion of remedial excavation activities, soil impacted with contaminants concentrations exceeding cleanup goals remained on the Successor Agency parcel due to the physical constraints preventing further excavation.

Response A4-7: The commenter suggests that the figure from the LUC which shows the remedial features currently at the site would be more appropriate than Figure III-3 that is included in the Draft EIR. Figure III-3 of the Draft EIR shows both the remedial features at the Sherwin-Williams parcel and the locations where contaminated soil was removed. No change to the figure is required in response to this comment.

Response A4-8: The commenter indicates that any dewatering conducted during project construction should be completed under a DTSC-approved Groundwater Management Plan. Regarding concerns associated with dewatering, refer to Master Response 3.

Response A4- 9: The commenter indicates that the DTSC must review and approve the SMP, Groundwater Management Plan, any future soil vapor investigations, and plans for removal of the transformer and the former underground storage tank which was abandoned in place.

In response to the comment, Table III-4 of the Draft EIR on page 64 has been revised to include additional DTSC approvals, as follows:

Table III-1: Required Permits and Approvals

Lead Agency	Permit/Approval
City of Emeryville	• General Plan Amendment • Planned Unit Development and Preliminary Development Plan • Final Development Plan(s) • Encroachment Permits • Tentative Map and Final Map • Acceptance of Public Easements/Dedications • Grading Permit • Building Permit • Stormwater Permit for C.3. LID Measures • Private Sewer Lateral Permit • Any ancillary contracts or agreements between the City (or its agencies) and the developer, including for a land swap, development agreement, etc.
Other Agencies	
Department of Toxic Substances Control	• Approval of Construction Plans • Soil Management Plan • Groundwater Management Plan • Any future soil vapor investigations • Plans for removal of the transformer and the former underground storage tank which was abandoned in place at the Sherwin-Williams Parcel.
East Bay Municipal Utilities District (EBMUD)	• Water Supply Assessment • Approval of reclaimed and potable water services
Alameda County Flood Control District	• Approval of new storm drain connection to Temescal Creek

Source: LSA Associates, 2015.

Response A4-10: The commenter requests information about the soil stockpiles on the City Parcel, including origin and available chemical quality data. As presented on page 305 of the Draft EIR, the City indicated that the stockpiles of soil are from City Public Works projects and are clean top soil. Per the analysis is the Draft EIR, there is no evidence of staining or odors, and no hazards have been identified. Available characterization data and proposed management of these soils would be described in detail in the SMP. The SMP would be subject to DTSC review and approval.

Response A4-11: The commenter indicates that it if pile foundations are used, they must be designed so that they do not impede, redirect or increase flow of groundwater at the site. Please refer to Master Response 3 and Response A4-2.

Response A4-12: The commenter indicates that the Draft EIR does not accurately characterize groundwater flow directions under the site.

In response to the comment, the fourth paragraph on page 287 of the Draft EIR has been revised as follows:

> On-going groundwater monitoring has been performed at the Sherwin-Williams parcel since 2012 as part of post-remediation activities.[29] The purpose of groundwater monitoring is to gather groundwater data to evaluate the effectiveness of remediation and to determine whether contingency actions are needed to achieve cleanup goals.[30] Groundwater monitoring is performed in accordance with an Operations and Maintenance Plan approved by Department of Toxic Substances Control (DTSC).[31] Groundwater monitoring involves collection of groundwater samples for chemical analysis and water level measurements of monitoring wells and piezometers located on- and off-site. During the October 2014 groundwater monitoring event, depth to groundwater measurements were collected from 14 monitoring wells and two piezometers located on the project site. Groundwater elevations at the project site during the October 2014 groundwater monitoring event ranged from 5.68 feet at the north parcel boundary near Temescal Creek and 10.06 feet North American Vertical Datum of 198832 near the southeast corner of the parcel near Building 1-31. Based on groundwater elevations, the groundwater flow direction in the northern portion of the site at the time of monitoring was toward the northwest toward Temescal Creek. ~~This groundwater flow direction is consistent with the topography of the project site.~~ In the southern portion of the property the groundwater flows to the southwest.

Response A4-13: The commenter requests information about the on-site soil stockpiles, including origin and available chemical quality data. Please refer to Response A4-10.

Response A4-14: The commenter request information regarding the completed remedial activities, including sample results documenting the contamination that was left in place. As indicated by footnote 26 on page 300 of the Draft EIR, documentation of underground storage tank removal and remedial activities performed at the Successor Agency parcel in 1994 and 1995 are presented in the 2006 Case Closure letter issued by Alameda County Department of Environmental Health (ACDEH). As indicated by footnote 29 on Page 301 of the Draft EIR, documentation of the 2008 remedial activities performed at the Successor Agency parcel is presented in the 2009 Remedial Action Completion Report prepared by Erler & Kalinowski, Inc. These documents are available on the City Planning Division website: www.emeryville.org/1019/Sherwin-Williams. Sample results documenting the contamination that was left in place are included in these documents.

Response A4-15: The commenter indicates that the DTSC will consider existing documentation of soil gas conditions and indoor air quality from previous soil gas investigations when determining the requirements for additional soil gas characterization, if any, related to future redevelopment. Regarding concerns associated with soil gas characterization, refer to Master Response 3.

Response A4-16: The commenter indicates that Mitigation Measure HAZ-2d should be included in Table II-1. Not including Mitigation Measure HAZ-2d in Table II-1 was a compilation typographical error.

In response to the comment, Table II-1 has been revised to include Mitigation Measure Haz-2d. See Chapter IV, Draft EIR Text Revisions, of this document that includes Table II-1 showing this revision.

Response A4-17: The commenter identifies a typographical error on page 319; as "DTSC" was cited as "DSTC".

In response to the comment, the first sentence on page 319 has been revised to fix the typographical error, as follows.

> The SMP must be reviewed and approved by ~~DSTC~~ DTSC prior to disturbing soil or groundwater at the project site." as the SMP would be implemented for both the Sherwin-Williams parcel and the Successor Agency parcel.

Response A4-18: The commenter indicates that proposed project development footprints appear to overlap portions of the high-permeability backfill area, an integral part of the remedial features and stresses that structural slabs, foundations, or footings must not impede groundwater flow through remedial features. Regarding concerns associated with impacting groundwater flow through remedial features, refer to Master Response 3.

Response A4-19: The commenter indicates that development footprints in the Reduced Density alternative appear to overlap portions of the high-permeability backfill area, an integral part of the remedial features and stresses that structural slabs, foundations, or footings must not impede groundwater flow through remedial features. Regarding concerns associated with impacting groundwater flow through remedial features, refer to Master Response 3.

Response A4-20: The commenter indicates that development footprints in the Lennar alternatives appear to overlap portions of the high-permeability backfill area, an integral part of the remedial features and stresses that structural slabs, foundations, or footings must not impede groundwater flow through remedial features. Regarding concerns associated with impacting groundwater flow through remedial features, refer to Master Response 3.

B. ORGANIZATIONS

Letter B1

To the Emeryville Planning Commission: Questions and Commentary on the Sherwin-Williams Site DEIR from Residents United for a Livable Emeryville, 6th March 2016.

Residents United is an organization promoting progressive action and pro-resident initiatives in the City of Emeryville. It was founded in 2008 to give residents a stronger voice in shaping the city. **1**

The report states that the City's General Plan is a "general framework" not a "blueprint." The citizens who helped develop the General Plan would like to know if this is an invitation to try to ignore it when it suits the developer to play fast and loose with it?

The same question should be asked about the city's zoning regulations and the Park Avenue District Plan. Will they be taken seriously when the final version of the EIR is formulated? **2**

The point of these questions is obvious: we want to see developer, city staff, Planning Commission, and City Council to pay close attention to the General Plan, Zoning regulations, and the Park Avenue District Plan in developing the Sherwin-Williams site.

Open Space Per Resident

With the requested number of residential units at 540; with the open space available on site at 3.54 acres; and with the average residents-per unit in Alameda County at 2.71 (as of 2010), the amount of open space per 1000 residents does not meet the city's General Plan objective of 3 acres per 1000 residents. The only way the amount of open space can meet the objective is to concentrate on building one-bedroom and studio apartments, and thus keep the total number of residents per unit below the Alameda County average and further reduce diversity and family size in Emeryville housing. **3**

Traffic and Transportation

The SW DEIR (Draft EIR) is inadequate because of the following:
1) LOS should not have been used per the Emeryville General Plan Policy T-P-3, which says that LOS "shall not be used to measure transportation performance in Emeryville documents..." T-P-3 goes on to name Quality of Service as a more inclusive and accurate measure of how all users of the streets are impacted. Please refer to the NACTO Urban Street Design Guide for a variety of things to measure to be more accurate. [SW DEIR, p. 88] **4**

2) The SW DEIR does not require SW employers to use reduced parking requirements in line with the General Plan Policy T-P-36. SW needs to be in line with Emeryville's new parking regulations of reducing the parking spots/person ratio - no longer is it to 1 parking spot per just 1 person. [SW DEIR, p. 114] **5**

Letter B1 *Cont.*

3) The SW DEIR does not require the SW project to have TDM (Traffic Demand Management) Programs for their employers and customers. The SW DEIR should mandate TDM Programs such as incentives, carpooling, bike shares, car share, secure indoor bike parking, central showers & lockers for cyclists, etc. [SW DEIR, p. 115] **6**

4) The SW DEIR must do more than just give lip-service to remedying the long-lasting impact this development will have on our community. The SW DIER must REQUIRE and actually DO the suggested mitigations measures and recommendations. And the SW Project must do more than just pay the Traffic Impact Fee. The process by which the details get ironed out must be clearly and transparently spelled out. Finally, the decisions must go through the Planning Commission and City Council and not just the City Staff. [SW DEIR, p. 115] **7**

5) The VMT (Vehicle Miles Travelled) is underestimated throughout the SW DEIR. The SW DEIR admits that the Total VMT will increase with the SW project but then goes on to say that the VMT/Household will decrease. This is only true if the assumption that the new residents created work at the new jobs created. This is a false assumption if the historic pattern continues (of most of the residents working outside of Emeryville and most of the Emeryville employees coming in from outside of Emeryville). [SW DEIR, p. 133] **8**

6) MXD+ is not the best methodology to use to provide data analysis. MXD+ is best used in areas which are transit-rich, which unfortunately Emeryville is not yet. MXD+ tends to underestimate the impacts of increased vehicular traffic will have on pedestrians and cyclists. [SW DEIR, p. 118] **9**

7) The SW DEIR does not require SW to use local hire for construction to reduce vehicular traffic as a Mitigation Measure. [SW DEIR, p. 171] **10**

Traffic Analysis in Appendix B of the Sherwin Williams Project (SWP) DEIR

The findings regarding traffic analysis in Appendix B of the Sherwin Williams project (SWP) DEIR are based on an erroneous assumption that negates the General Plan and therefore are revealed to have no value. Specifically, the General Plan provides for bike boulevards on Horton Street, 45th Street and 53rd Street that the findings in the DEIR assumes will be overturned by the City Council. **11**

The Pedestrian Bicycle Plan (PBP), a subordinate plan to the General Plan defines a bike boulevard as having less than 3000 vehicle trips per day (VTD) for those corridors west of Hollis Street. This includes the bike boulevards on Horton Street, 45th and 53rd streets. The DEIR was prepared with an assumption of two half diverters on Horton Street (one at 40th Street and one at 53rd Street). The two half diverters would allow traffic in one direction only. As the DEIR traffic study reveals, the resultant project plus cumulative traffic will be in excess of 3000 VTD on all three bike boulevards. For the Appendix B traffic study to have any value for the decision makers, the PBP would have to be amended to allow more than 3000 VTD, decidedly not something within the bailiwick of the DEIR. There are no findings of fact that could be made that would allow such an assumption to be made. It must be assumed by the DEIR the General Plan will not be so amended by the City Council. **12**

Submitted by

Ruth Major

For and on behalf of Residents United.

COMMENTER B1
Residents United for a Livable Emeryville
Ruth Major
March 6, 2016

Response B1-1: This comment is introductory in nature, and does not raise concerns regarding the environmental analysis or information contained within the Draft EIR. Please see Responses B1-2 through B1-12, which respond to concerns the commenter raised within this letter.

Response B1-2: The questions asked in this comment are rhetorical in nature and do not relate specifically to the information and analyses contained in the Draft EIR. The policies and programs contained in the General Plan, Zoning Ordinance, and Park Avenue District Plan related to the project were discussed and described throughout the Draft EIR, and the project's consistency with these policies and programs was identified as well. Please see also Master Responses 1 and 2 regarding the City's review process and the project description.

Response B1-3: The text of the General Plan policy related to park acreage standards is provided below. It should be noted that this policy relates to maintaining the City-wide average of park and open space, and is not a site specific requirement.

> Policy PP-P-1. Increase park acreage to serve the needs of the growing population and address current deficiencies in park and open space standards. Maintain a standard of three new acres of parkland per 1,000 new residents, and 0.25 acres per 1,000 new employees.

As discussed on page 467 of the Draft EIR, the City currently has a total of 15.9 acres of public park space, which represents a ratio of 1.56 acres per 1,000 residents.[3] The City proposes 22 to 25 acres of new neighborhoods parks, as well as approximately 5 acres of other open space. The combination of existing, planned and proposed parks would result in 41 to 46 acres of City-owned parkland, plus the Greenways, green streets, and other trails. This total represents a ratio of 2.5 to 2.8 acres per 1,000 residents.

The proposed project is expected to generate 923 residents and would provide over 3 acres of combined park and open space (1.46 acres of public park or open space areas, depending on which development option is constructed; and 2.08 acres of publicly accessible open space on the Sherwin

[3] Dyett & Bhatia. 2009 (Amended 2013). City of Emeryville General Plan. Chapter 4.

Williams parcel). The 1.46-acre Successor Agency parcel was identified by the City as a future park location (refer to Figure 4-1 of the General Plan).

In development Option A, there would be no City Park on the Successor Agency owned portion of the project site. Instead, Option A would have a significant portion of the publically-available open space (approximately 0.75 acres) within the center of the project site, with 0.71 acres remaining for open space uses in its original location on the Successor Agency parcel. However, in Option B, there would be a 1.46 City Park on the Successor Agency portion of the project site. Although the configuration of the park and open spaces are different under both development options (Option A and Option B), the proposed project is expected to generate approximately 923 residents and would provide over 3 acres of combined park and open space. The additional open space that would be provided by the proposed project would therefore meet the General Plan Policy PP-P-1 of maintaining a standard of 3 new acres of parkland per 1,000 new residents.

In this comment the commenter notes that the Alameda County average household size of 2.71; the average household size for the City of Emeryville per the US Census, which is used in the Draft EIR, is 1.71 residents. As noted in the Draft EIR (page 80) and stated in the City of Emeryville Housing Element[4] the 2010 average citywide household size was 1.71 residents. The average in Emeryville was low in comparison to the Alameda County and statewide averages of 2.71 and 2.87, respectively. Similarly, the average family size of 2.61 persons in Emeryville was low in comparison to Alameda County and the State of California, which had averages of 3.30 and 3.45, respectively.

Response B1-4: As discussed in the TIA for the Draft EIR, The City of Emeryville does not have a level of service policy for vehicles, but strives to achieve a quality of service. Quality of service recognizes that people travel by a variety of modes, not just in vehicles, and that the use of an auto-focused level of service standard does not address the mobility needs for non-auto roadway users.

For this assessment, level of service results are provided as a proxy for evaluating the transportation experience for vehicles, transit, and bicyclists and to guide the development of the transportation system in the project vicinity while balancing the variety of travel modes in the area.

Significance criteria for all travel modes were identified in the Draft EIR.

[4] City of Emeryville, 2014. *Emeryville House Element 2015-2023.*Adopted November 18, 2014.

Response B1-5: The project does not propose one parking spot per one person for commercial uses. The parking ratios proposed for commercial uses in both Options A and B are 8 spaces per 1,000 square feet for food and beverage uses; 3 spaces per 1,000 square feet for retail uses and 2.4 spaces per 1000 square feet (see Figures III-6 and III-7 of the Draft EIR). These numbers are in conformance with the City's Planning Regulation Section 9.4.403.

Response B1-6: The City will require the project applicant to implement a transportation demand management (TDM) plan (see also Letter C15 in which the applicant provides a draft plan), and will be required to monitor the effectiveness of that TDM Plan. As the project approvals progress through the public hearing process, the Planning Commission and City Council will have the opportunity to review and refine the project mitigation measures.

It should be noted that the trip generation estimates used in the Draft EIR already considered the non-motorized infrastructure that would be constructed with the project, and also considered the applicable City requirements that would apply to this project, including the preparation of a TDM plan, maximum parking supply, unbundling of parking prices and establishment of a bike share pod within the project vicinity. The Draft EIR analysis also included a trip reduction factor that took these TDM improvements into account.

Response B1-7: As noted on page 1 of the Draft EIR, in the section titled "Purpose of this EIR", the Draft EIR is designed to inform City decision-makers, responsible agencies, and the general public of the proposed project and the potential environmental impacts of project approval and implementation. This Draft EIR will be used by the City and the public in their review of the proposed project and associated approvals, including those described in Chapter III, Project Description.

CEQA requires that prior to approving a project, the City Council, as Lead Agency, adopt a Mitigation Monitoring and Reporting Program (MMRP) when the project requires mitigation measures as the result of a CEQA analysis (Public Resources Code Section 21081.6(a)(1)). The City Council is required to ensure that the measures are fully enforceable, through permit conditions, agreements, or other means (Public Resources Code Section 21081.6(b)). The MMRP will be prepared and designed to ensure project compliance with mitigation measures during project implementation.

The project will be required to implement a variety of mitigation measures, including payment of fees, constructing physical improvements, such as pedestrian and bicycle facilities, implement a transportation demand management (TDM) plan, and will be required to monitor the effectiveness of that TDM Plan. As the project approvals progress through the public hearing process, the Planning Commission and City Council will have the opportunity to review and refine the project mitigation measures.

Response B1-8: The VMT assessment was conducted using the Alameda CTC regional travel demand model. While the work location of future residents and the residential location of future site employees is not known, locating additional housing in a job-rich area provides increase opportunities for people to live closer to their places of employment. Although many Emeryville residents do travel outside of the City of Emeryville for employment purposes, which is to be expected given the relatively small population and geographic size of the City compared to its closest neighbors, Oakland and Berkeley, there are a number of employment opportunities within a ten mile radius of the project site.

Response B1-9: As detailed in the EIR, the project site is within walking distance of numerous AC Transit and Emery-go-Round stops, with over 25 buses serving the area during peak hours connecting the project site by transit to numerous destinations within the Bay Area. Details of the MXD+ model and validation process are provided in the TIA.

Response B1-10: A significant but temporary transportation impact related to the construction of the project was identified. Mitigation measures to reduce the construction impact to the transportation system to a less-than-significant level were identified; this measure does not specify local hiring as part of the measure.

Response B1-11: It is unclear from the comment what erroneous assumption was made for the bicycle boulevard analysis. The TIA identifies significant impacts on several bicycle boulevards where the existing volume exceeds the desired level and the addition of project traffic would further increase vehicle traffic. Some impacts can be mitigated to a less-than-significant level through the incorporation of additional bicycle boulevard treatments, while other impacts would remain significant and unavoidable.

Response B1-12: Please see Response B1-11 regarding bicycle impacts.

Letter
B2

GECO
Grassetti Environmental Consulting

Miroo Desai, AICP
Senior Planner
City of Emeryville
1333 Park Avenue
Emeryville, CA 94608

March 7, 2016

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE SHERWIN WILLIAMS DEVELOPMENT PROJECT

Dear Ms. Desai;

Grassetti Environmental Consulting (GECo) has been retained by the 45th Street Artists' Cooperative (Cooperative) to assist in their participation in the City's CEQA process for the Sherwin Williams Development Project. On behalf of the Cooperative, in February 2015, we submitted comments on the Notice of Preparation (NOP) for the project EIR. We have reviewed the Draft Environmental Impact Report (DEIR) and our comments are presented below.

In brief, the document reads more like a program-level EIR than a project-level one. It is missing substantial information from the project description, even though that information was specifically identified and requested in our comment letter on the NOP, and is essential to conducting an adequate impact assessment. In addition, the project fails to meet numerous City plans and policies, including the density bonus requirements, which render it infeasible on its face. The DEIR also is deficient in addressing a large number of potentially significant environmental impacts, either sweeping them under the rug via a cursory discussion/conclusion, or through deferral of the actual impact analysis and mitigation development to future studies and permits. 1

The DEIR leads itself astray through its slavish use of the Initial Study (IS) checklist items as its criteria and thresholds of significance for most topics. As detailed in this letter, this approach results in a document that misses some of the most important issues, while requiring the reader to wade through detailed discussions of irrelevant items. An IS, which is a screening document to direct further CEQA review, is very different than an EIR, which conducts the detailed review. Further the use of IS checklist criteria/thresholds of significance is in error. With the exception of the Mandatory Findings of Significance, an IS checklist does not provide any thresholds or criteria of significance. Rather it identifies topics to be evaluated during the screening for potentially significant impacts. The EIR should be revised to focus on actual impacts of potential significance, not the often-irrelevant CEQA checklist questions.

<u>Project Description Issues</u>

As detailed in our NOP comment letter and summarized under "Plan Compliance Issues" below, the proposed project appears to conflict with a number of City policies, including density provisions. 2

Despite our NOP comments requesting specific information that needed to be added to the project description, the DEIR project description continues to be unstable and incomplete. The DEIR project description is lacking the following items:

- Full-sized scalable drawings, identifying uses and occupancy types, including floor plans and full building sections with roof-top equipment and penthouses, as well as schematic elevations also are needed to identify impact. As submitted, the application materials are of insufficient detail and of too small of a presentation scale to support an informed analysis and decision. **2 cont.**
- Calculations and graphic displays of site areas devoted to private and common open space allotments, and mandatory 10% site landscaping areas for each created parcel as well as calculations of net project site area.
- Calculations of floor area of parking garage and access drives.
- Unit mix and model size calculations (so that their feasibility/number of units/alternatives can be accurately determined). What is the breakdown of apartment size: how many studio, 1 bedroom, 2 bedroom and 3 bedroom units?
- A Transportation Demand Management (TDM) Plan specifically geared to reducing and managing automobile trips to and from the site as a part of the application. Given the high total parking allowances and significant potential trip generation impacts of the project, appropriate site layout and circulation system design may be dependent upon such a Plan. **3**
- A discussion of how the project will comply with bonus requirements that are essential to achieving the building size and unit count proposed in the DEIR. **4**
- The Project Description must identify the method of foundation construction because it affects the analyses of noise, dust, truck traffic, etc. For example, piles may not be feasible given the contamination. Other foundation designs may require removal/importation of very large quantities of earth (up to 645,000 cy), with associated potential impacts to emissions, dust, hazardous materials, and cultural resources. **5**
- The description of the construction schedule is inadequate (page 63): "The project is currently contemplated to be built in one phase with construction commencing in the third quarter of 2016 or as soon as all applicable permits are issued. The first units would be delivered in the second quarter of 2018." Please provide a breakdown (preferably in a table format) that identifies the construction activity (e.g. demolition, grading, services installation, building); duration of construction activity, peak number of construction workers by construction activity. Identify when construction is anticipated to commence, for example Summer 2016; and when construction will be completed for example, Spring 2018. **6**

Moreover, because the project is to be subdivided into individual parcels that may be separated and sold, the project application should include a Tentative Map (TM) showing lot boundaries as is required as part of a PUD submittal (Section: 97.1005.E). The map should include all appropriate drainage, utility, cross access and maintenance agreements necessary to maintain comprehensive functionality of the project as a master development following potential parcel separation. The TM should also demonstrate how each individual lot would comply with requisite setback, height, landscape and density and intensity standards, among others, of the General Plan, Zoning Ordinance and other governing regulations as stand alone developments after potential sale or conveyance and separation. Reciprocal arrangements for access to 'residential amenities' should also be demonstrated, and permanent parking allotments identified for each individual parcel's use. **7**

The TM should also indicate whether sufficient sanitary sewer and waste-water treatment capacity and other public utilities exist to serve the site. **7 cont.**

Therefore, we are requesting that the City suspend CEQA review of the proposed project until these deficiencies have been remedied. Moving forward with a potentially infeasible project (see discussion below on bonus/density) renders the CEQA process meaningless, and skews alternatives such that they respond to a larger project than may even be permissible. As noted in our NOP comment letter, because of these deficiencies, it was premature to start the CEQA process. As the court stated in County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 192- 193, 139 Cal.Rptr. 396, "[o]nly through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal ... and weigh other alternatives in the balance. An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." Thus, "[t]he defined project and not some different project must be the EIR's bona fide subject." (Id. at p. 199, 139 Cal.Rptr. 396.) Without the information described above, the proposal's benefits simply cannot be meaningfully balanced against its environmental costs. **8**

<u>Plan Compliance Issues</u>

The project fails in numerous ways to comply with the City's plans and policies. As detailed below, this non-compliance is so severe as to render the project infeasible.

The DEIR fails to address the Project's conformance with setback, open space, landscaping, building separation, density and other requirements for residential usage as well as calculations of net lot acreage, both before and after potential and anticipated land subdivision. **9**

Project Use Classification Issues

As discussed in out NOP comment letter, the EIR fails to explain why the Project should be considered mixed-use rather than essentially residential (see discussion our NOP comment letter). If the project use is determined to be residential, then it should be evaluated as such in the EIR for compliance with the residential development provisions of the City's Zoning Ordinance and General Plan. **10**

It is debatable if the Project is truly definable as mixed use. Of the 715,600 SF of countable Floor Area and several hundred-thousands more of parking facility that are not included in the FAR calculation, only 94,600 SF is apportioned to commercial usage of which 79,600 is accounted for in the existing building on Parcel A and 7,000 is identified as 'residential amenities.' Residential projects of the proposed scale are always expected to provide some form of 'amenity' (community and exercise rooms, gyms, spas and the like) for the project residents. As such, that 7,000 SF should not be attributed to the commercial component of the project. Moreover, existing Building A is simply being reoccupied, not built and added to the City's existing commercial stock. **11**

Building A has a very tenuous physical relationship to the larger project and is not well integrated into it. Given that it will also be individually parcelized there is a very high probability that it will be sold off, as it is outside of most property management operation's standard business practices to combine both residential and commercial properties in this manner. Given that, the commercial component of the Project would comprise only 8,000, SF, a mere 1.2% of the countable residential

FAR and well less then 1% of the total proposed new building area (including garages). In addition, given its overwhelmingly residential character, purely residential development standards in terms of set-back, landscaping, building separation and the like should provide the basis of assessment rather than mixed-use and commercial ones in its present form.

The Project should, therefore, be considered to be residential which, at its size, would not be allowable in this District, which prioritizes Mixed-Use, residential being the secondary accompaniment. This policy designation is reiterated in the Park Avenue District Plan, which favors small-scale retail uses. **11 cont.**

Parcelization Issues

The EIR fails to evaluate the proposed plan in light of the fact that parcels may be sold off separately, such that each parcel includes adequate open space, service and utility provision, and conformance with other applicable City land use and development standards. This information also is critical because the property is proposed for parcelization, with each building to be situated on an individual lot, which could be sold separately. Without a parcel map showing actual lot boundaries, moreover, it is not possible to determine if development standards that would be met by the overall project could also be met if parcels are separated into individual ownerships. For example, should Parcel A be separated from the other parcels, would it still have conforming density, FAR ratios and setbacks as well as sufficient open space and on-site parking if a portion of those facilities are accounted for on other lots in the over all Project? **12**

Policy Compliance

The analysis unacceptably presumes that it is a given that future alterations to land-use policies would obviate a raft of existing Project non-conformities (summarized below) in a post-facto manner. The DEIR should clearly state all non-conforming and potential non-conforming aspects of the Project as presented and identify what discretionary actions, if possible (because it does not appear that the Project could even be fully accommodated under present regulations as currently proposed), would be needed to mitigate them. **13**

It is impossible to fully assess the extent of the mismatch between the Project and City policies because of the incomplete status of the application, as discussed under Project Description Issues, above. Without full-sized scalable plans, a subdivision map, floor plans and specific calculations of requisite private, common and public open space as some, but not exclusive, examples of lacking information, it is not possible to determine if the project as a whole does in fact adhere to requisite set-back, parking or open space and/or park requirements and other requirements, not to mention basic density and intensity. **14**

Density Bonus Non-Compliance

With buildings of 75' and 100' in height, 100-unit/acre net-density and a 3.0 FAR, the Project assumes achievement of maximum possible development bonus points allowed by Section 9.4 of the City's Zoning Ordinance, yet nowhere in the DEIR are those special amenities identified. The DEIR (p. 51) states, 'The applicant has not yet determined how the project would obtain the required bonus points". The DEIR clearly states that no affordable dwelling units will be provided on-site, which is mandatory for any bonus of over 25% (the project is claiming a more-than-50% **15**

bonus credit). Table V-2 on p. 469 of the DEIR identifies bonus categories that are no longer applicable. On p. 449 the DEIR states, "Assuming the approval of the General Plan Amendment and density bonus provisions, the proposed project would generally be consistent with applicable General Plan policies." Similarly, Table V-2 (p. 457, 458, 459, 462) repeatedly states, "The proposed development assumes that the project would meet the criteria for density bonus." However, on p. 469, the DEIR states:

> The project applicant would seek a development bonus for the proposed project in exchange for providing public benefits. The public benefits offered include:
> - Retention and Adaptive Reuse of Building 1-31
> - Pursuit of LEED ND Certification (Silver)
> - Transportation Demand Management:
> - Bicycle sharing:
> - Bike lockers:
> - Electronic transit information signs
> - Electric vehicle charging stations (5 percent of nonresidential parking)
> - Family Friendly Housing (5 percent of units to be 3 bedroom units):
>
> **However, the proposed project would not include affordable housing. [emphasis added]**

15 cont.

Further, the EIR fails to acknowledge and address that the proposal exceeds the allowable density and intensity standards of the City's General Plan and Zoning Ordinance. Nor does it identify a realizable path to achieve the proposed densities and intensities.

16

The fact that the project would not include affordable housing eliminates any possibility that it could comply with density bonus requirements. Further, the bonus items listed above are the City's old requirements and are entirely inconsistent with the current bonus regulations. Therefore, the Project cannot achieve a bonus level that would allow for development of the size and scale proposed. The Project is not only non-conforming in this regard, but also infeasible. As discussed below under the Alternatives section, because the project is infeasible, the alternatives to the project also are misconstrued and, for the most part, infeasible, resulting in the EIR failing to meet CEQA's requirements for a reasonable range of feasible alternatives.

17

Other Zoning, General Plan, and Area Plan Compliance Issues

On p. 442 of the Planning Policy section of the DEIR, the Project is declared to be in compliance with Zoning standards, the General Plan and all of its Elements, as well as with the Area Plan and other land use and policy regulations. Yet elsewhere throughout that section, specific references are made to non-conformities that will require wholesale policy alterations, waivers and/or uncertain discretionary approvals. Moreover, the scope and degree of potential non-conformities are consistently understated. The DEIR's discussion of the Project's conformance with City plan's and policies fails to adequately address the project's adherence to building bulk, tower spacing, sky exposure and uninterrupted sunlight policies of the Urban Design Element and Zoning Ordinance. This is addressed further in comments on the Visual Resources and Land Use sections. Project compliance with individual City goals, policies and programs is discussed below:

18

- LU G-1 *Balance of uses* and LU G-2 *Mixed use city.* As noted above, the mixed use character of the project is questionable

- LU-P-1 *Land uses will be consistent with the Land Use Classifications and* LU-P-10, 11, 12 & 16 *Height & Intensity.* As submitted, the Project does not meet any of these requirements. Compliance would only be possible if the City were to grant full development bonuses which, as noted above, is not possible given the EIR's statement that the applicant will not provide affordable units. Lack of surveyed, scalable plans showing the amounts and distributions of developable areas and open space types also put compliance into question. The analyses for these items improperly presume an ability to obtain a full development bonus. **18 cont.**

- LU-P-26 *Economic Development. A mix of retail.* The analysis misstates the amount of retail space provided as 10,000 SF, it should read as 8,000 SF. **19**

- UD-G-2. *A diversity of building types and scales.* The discussant refers only to scales, whereas all of the new buildings will be similar types and scales; large broad residential structures surmounting and/or voluminous parking garages. In terms of scale itself, all of the buildings will be bulky and tall. Simple changes in building sizes (larger or smaller) do not describe design variation (as called for in the criteria), just size. Penthouses and roof-top equipment should also be accounted for in any design review or visual analysis.

- UD-G-4. *Strategically located new parks and outdoor open spaces to enhance livability and pedestrian orientation,* PP-G-2 *New Public Spaces —A public realm and new public parks and plazas that serve as focal points of the community and* PP-G-3, *Integration of Public Spaces*. These orientation and focus criteria could be better served if public open space areas were provide in front of Building B-2 along Horton Street for the purpose of a frontage relief and connectivity with industrial and residential uses to the north and east. **20**

- UD-G-19. *Design and construction that respects existing architecture, but creates new signature places.* The discussant only mentions reoccupation of the existing building as a means to satisfy this criterion. No analysis is made of proposed construction's inherent merits or relationship to 'existing architecture'. **21**

- UD-P-35. *Tower separation.* While this criterion which mandates separation standards for towers over 100' in height is not cited nor addressed in the DEIR, it may be relevant to the project as towers over that height (150' and 200') have previously been approved, and are designated as part of the General Plan, on the adjoining 'Rifkin Lot' which may be closer to proposed buildings then this criterion allows. **22**

- UD-P-40. *Neighborhood structure and pedestrian scale development should be prioritized*. The scale and character of existing neighborhoods should be maintained to ensure connectivity and continuity of street design within each district. The discussant simply states the height of buildings and types of street lighting and street trees within the project, but makes no reference to relationship of project buildings and placement to the existing neighborhood nor pedestrian experience. This unaddressed issue of scale and neighborhood structure is also relevant to the goals and policies of the Park Avenue Area Plan. **23**

- PP-P-1. *Increase park acreage to serve the needs of the growing population and address current deficiencies in park and open space standards. Maintain a standard of three new acres* **24**

of parkland per 1,000 new residents, and 0.25 acres per 1,000 new employees. The criterion cited is for Parks, yet the discussant freely intermingles project open space (and that without clear distinction made between publicly accessible, common or private open space nor landscaping requirements) into the criterion analysis. Even with the inclusion of open space into this park metric, the 3-acres/1000 residents goal is not forecast to be met at the anticipated 923 (1.7 persons/unit) inhabitant Project density. Moreover, the discrepancy will probably be greater than stated, as the projection of 923 inhabitants in 540 units is probably too low given the newly designated family-friendly requirements, the minimal allowable number of studio units, and the elevated housing prices in the City and region, which are increasing reliance on roommates and shared accommodations. **24 cont.**

- P-P-11. *All large new residential developments shall include a combination of private and common open space.* The need for a graphic submittal showing apportionment of open spaces has been noted above. The analysis also states that all private open space will be provided by balconies, yet the schematic plans do not show this feature and it is not at all clear that it would be feasible to do so for all units or what impacts such a proliferation of balconies would have in terms of Urban Design policies and/or other environmental issues (e.g. noise, air quality...). **25**

Additionally, it is not clear from the DEIR how open space in the project is measured and apportioned between Public Park, publicly accessible private open space and mandatory project common and private open spaces, nor even what the actual developable area of the parcel is. The DEIR states that 20 SF/unit private open space will be provided on balconies, but that is not shown, nor certainly feasible, on the schematic plans. In any case, the portion of the oval roadway that has been renamed driveway and/or emergency access/pedestrian path should not be countable as open space nor should the narrow remainder landscape strips that predominately function to meet separate landscape requirements from open space ones. **26**

- H-2-1-2. *Continue to offer a density bonus for developments that include affordable units, and consider offering additional regulatory incentives such as free or reduced-cost pre-application meetings, study sessions, and/or expedited application review and permit processing.* Adherence to this criterion is critical as the Project as proposed would not be feasible without full compliance, yet none of the specific actions cited in the analysis meet its requirements. In fact, as discussed above, the DEIR (p.469) flatly states, "the proposed project would not include affordable housing", without which the bonuses cannot be granted. **27**

- H-2-1-2. *Continue to implement the Affordable Housing Program (formerly known as the Affordable Housing Set-Aside Ordinance) to require the inclusion of below-market-rate units in residential projects.* The analysis clearly states failure to meet this criterion.

- T-G-5. *A safe, comprehensive, and integrated bicycle system* and T-P-16 *Safe Pedestrian access.* As designed, the intersection of the bicycle/pedestrian path and street system directly in front of the garage exit/entry in front of Building C-2 could create an unsafe modal conflict. This section of path was originally shown as a part of the street system supporting the 'South Park' oval park theme which the project was designed and marketed around and, therefore, (and still) uncountable as 'open space.' **28**

- T-G-8. *A balanced parking supply system— Parking supply that balances economic development, livable neighborhoods, environmental and energy sustainability, and public safety, while reducing dependence on the automobile.* Since parcels may be sold into separate ownerships, safeguards for permanent assignment of parking and loading spaces for individual buildings on separate lots as well as right of access need to be established.

  Also, given the expected changes in unit types from the submitted project, it is unclear if the proposed amount of parking stalls will meet minimum requisite ratios. The proposed allocation and placement of loading spaces also do not appear to meet the criteria of ZO Section 9.4.409 Loading, nor truly serve the functional needs of the Project. Also, it appears that proposed road-bed and sidewalk widths are below City standards. **29**

- *Policy T-P-3 of the Transportation Element states that a Quality of Service Standard shall be developed and used by the City to measure transportation performance of projects.* The development of said standard is identified in the General Plan work plan as a 0– 5-year action item. In the absence of the QOS standard, the City lacks an appropriate standard for measuring transportation performance as mandated in its General Plan. The EIR fails to explain how and why the Project approval process should go forward until such time as City standards are enacted by which its transportation impacts could be analyzed and measured. No QOS metrics for analyzing transportation impacts have been identified in the DEIR. **30**

Although policy conformance is claimed for all of the above cited goals, policies and programs and the Project as a whole, the point-by-point analyses of these either fail to directly address the issues or support the conclusions of compliance. In addition, the DEIR, pp. 76-77 fails to actually evaluate any land use conflicts (it just lists nearby land uses followed by a conclusatory sentence), **31**

<u>Cumulative Impacts</u>

The EIR's traffic, noise, air quality, aesthetics, wind, shading, and health risk analyses should be evaluated in the context of cumulative impacts of the many reasonably foreseeable, planned, entitled, or under construction buildings in the area. Cumulative impacts should consider both construction and operational effects on these resources. Section 15130 of the CEQA Guidelines provide that the cumulative impact assessment may either use the listing approach, or projections from local or regional planning documents. Because of the number of specific projects that are planned, approved, or under construction, the former method would be most appropriate. Use of the plan method would lead to an inaccurate assessment of short- and mid-term cumulative impacts, as it would not reflect actual proposals. For the long-term cumulative impacts, we recommend that a combination of the list and plan approaches be used, where known projects in the pipeline are addressed as a list and long-term planned buildout also is considered. **32**

In addition to the projects identified on pp. 73 and 74 of the DEIR, the document should also consider the cumulative impacts of the project and following existing (but not fully occupied) and potential developments: **33**

- Emeryville Transit Center and EmeryStation West - This is a Mixed-use transit-oriented development and public parking structure with about 250,000 sq. ft. of office/lab/retail space, 4 Amtrak bus bays and 148 parking spaces in a 165-foot tall tower on the "Mound" site (just north of the Amtrak station on west side Horton between 59th and 62nd streets); and a 675-space, 7 level parking garage with 3,620 sq. ft. of ground level commercial space on Heritage Square site (on east side of Horton Street between 59th and 62nd streets).

- Parc on Powell – The residential portion of this project was partially leased during traffic study and most of its commercial space remains unleased.

- Emery Station Greenway – This brand new 82,900 sq. ft. building at Hollis/Powell intersection remained unleased for several years. This development has now been leased to Stanford Health Center with tenant improvements starting in late 2015.

- Pixar Warehouse - Hollis at 53rd. Phase II building permit was issued in late 2015 for this 28,637 sq. ft. building intended for storage of archives and reference materials

- Emeryville Center of Community Life (ECCL)- Scheduled to open fall of 2016, the city's multipurpose community facility, Emery Secondary School, and Anna Yates Elementary School occupy virtually a city block on San Pablo Ave. between 47th and 53rd St. on the west side of street.

- Pelco Building- This building, at 1550 Park Ave., (at Halleck and Park Ave. directly across from Blue Star Corner) was sold in 2015 and the new owner intends to expand the existing industrial building to include mixed use with 23 new residential and 2 commercial units. This project may go to a planning commission study session in April 2016.

- Potential replacement of the Banker Marks Building. Owners' Representatives came to the Park Avenue District Advisory Committee over a year ago before the committee was disbanded by the city and made known their intention to develop this property in o mixed use with residential. It is currently exclusively commercially leased.

- Another full block building at 40th and Horton NW corner has 40,000 sq ft for lease. It is unclear if this was in operation at the time of the traffic study. Restoration Hardware submitted a proposal for the 40,000 over a year ago for some fashion of retail use but then withdrew their application. Restoration Hardware had short-term leased the building for a few months for an enormous on-going seconds sale and there was a lot of pushback from the neighborhood as to the traffic issues this created. Since this time the building has remained for lease.

- Grifols met with the Planning Department in 2015 to propose a new structure on the surface parking lot immediately south of their parking structure at Horton and Stanford on the west side of Horton. The Planning Department rejected because it was not part of the PUD but Grifols is possibly going back to the drawing board with this one. The status of this project should be reviewed and updated as appropriate.

33 cont.

- The Chiron PUD allows the potential development of a tower. Is this the same project as listed as on page 74 for the 2005 Novartis approval? The PUD is much older than that. Please clarify. **34**

In addition the deficiencies in the cumulative projects list, the DEIR's cumulative impact analyses are deficient in the following ways: **35**

- It includes no analysis of cumulative land use impacts. **36**
- It has no actual analysis of population/growth inducement impacts, just conclusions/deferral to plan conformance. **37**
- It uses an incorrect analysis of cumulative population/housing impacts (relying on the City's average per-unit population rather than a project-specific population calculation, based on the proposed unit mix). **38**
- Cumulative water supply and public services impacts are not addressed.

<u>Construction Impacts</u>

In our NOP comment letter we specifically requested that EIR evaluate the full suite of potential construction impacts, including noise, air quality, traffic, parking, and health risks. Because construction will occur over 3 years or longer, temporary impacts should not be considered less than significant based on their impermanent nature, and should be fully evaluated and mitigated. **39**

The EIR fails to address the following items of concern to the Cooperative that were identified in our NOP letter:

- Construction access and truck loading/unloading. As mitigation, delivery of construction materials by rail should be required. **40**
- Construction traffic blockages on Horton and Sherwin, and attendant impacts to emergency response. **41**
- Construction dust emission impacts to health and to the ability for artists to conduct their work (much of which requires a dust-free environment), especially in light of the full-time live-work occupancy of the 45th Street Artists' Cooperatives, and the fact that that building 's only ventilation is from opening windows and skylights. **42**
- Construction noise impacts to the full-time occupants of the 45th Street Artists' Cooperative. The analysis should consider specific physical conditions such as noise permeability of 45th Street building windows in identifying impacts and mitigation measures. It may be necessary to retrofit the 45th Street building with double pane windows and air conditioning before the start of construction of the Project. Note that the City's noise ordinance assumes that residents are not home during the work-day – in this case, they would be, resulting in potentially significant impacts to home and work lives of residents. Please note that residents have previously experienced some similar noise and air quality impacts during the remediation of the site, and would be considered experts under CEQA (per *Oro Fino v. Eldorado County* and *Berkeley KJOB v. Board of Port Commissioners* decisions).

Baseline Issues

Several of the buildings at the Novartis/Grifols facility on Horton Street have been temporarily empty during remodeling. It appears that the baseline traffic counts that also form the basis of the air quality and greenhouse gas analyses, were taken during the period when these buildings were empty or only partially occupied. Because this was an anomalous situation that fails to describe the typical traffic baseline, is should not be used as the baseline for these topics in the DEIR. The DEIR traffic, air quality, and greenhouse gas analyses are uninformative and misleading absent consideration of full use of these existing, but temporarily unused, buildings. This conflicts with the requirements set forth in the *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) decision, which permits use of a future baseline when use of the existing baseline would be uninformative and misleading, and the *North County Advocates v. City of Carlsbad* (September 10, 2015) decision. This latter decision addresses the exact same situation regarding including traffic from temporarily empty buildings in the baseline, and concludes that such inclusion is required. Note that according to the *North County* decision, the existing Building A may also need to be considered operational, for traffic and other related impacts. **43**

Population/Housing/Growth Inducement

The DEIR includes no analysis of population/growth inducement impacts, just a deferral to future General Plan conformance followed by a conclusion statement. As noted in our NOP comment letter, the 100-unit per acre density proposed for the project is greater than any other Emeryville project. The EIR should evaluate the potential growth inducing impacts of the precedent that would be created by permitting this additional density at this site. The DEIR's Growth Inducement discussion needs to be augmented to address whether granting of bonuses to this project would induce growth in the City. **44**

Plan compliance is not equal to no new population growth. The EIR's reliance on "substantial unanticipated growth" as its significance criteria for growth inducement is unsupported. Please describe how the project and cumulative projects would affect Emeryville's jobs/housing balance, which is one of the key factors affecting growth. **45**

Further, given the extreme construction effects (noise and dust) on the 45th Street Artists Cooperative (which relies upon open windows as its only ventilation), which may result in their inability to live or work there, the project may result in displacement of residents. The EIR preparers should discuss this issue with the Cooperative's residents and seriously evaluate this potential impact. **46**

Traffic

Criteria of Significance

As discussed in our NOP response letter, absent adoption of a Quality of Service (QOS) standard by the City, it is not clear how this impact can be adequately addressed in the EIR. The DEIR fails to use Level of Service as a significance criterion, but also fails to use Quality of Service, because no QOS evaluation metric or criteria has been adopted by the City (and, in fact, there is no definition of QOS in the transportation engineering profession). Instead, the DEIR's Traffic significance criteria use language so vague that it renders the criteria meaningless. The LOS impact "recommendations" **47**

should be mitigation measures until such time as a QOS criteria is adopted by the City. LOS impacts should also be considered for significance. **47 cont.**

The discussion of how LOS is considered in evaluation of significance is, technically speaking, mush. Intersection improvements that "may be considered" to "enhance mobility…" should be required as part of the project or not. Because of the vague, non-committal way that this discussion is structured, the reader cannot tell what improvements the City is proposing to reduce traffic impacts of the project and cumulative development. **48**

Further, the DEIR's significance criteria of no increase in per capita VMT (p. 1150 is unsupported and fails to comply with recent case law (Center for Biological Diversity v. California Department of Fish and Wildlife, December 2015) and the State Office of Planning and Research's draft guidelines for evaluating VMT, which propose a threshold of 15% existing average per-capita VMT as the criteria of significance[1]. Please revise the DEIR VMT analysis to assess compliance with this threshold. **49**

The basis/justification for the DEIR's 95th percentile queuing significance criteria (p. 115) also should be identified in the DEIR. **50**

Caltrans' significance criterion for freeway on/off ramps (p. 117) is misstated: the DEIR states that an exceedence of Caltrans' significance criteria "may be considered significant". "May be considered" is not a criterion of significance. Please revise to "would be considered significant". **51**

Technical Deficiencies in the Traffic Analysis

PHA Transportation Consultants conducted a detailed peer review of the traffic study underlying the DEIR's traffic section. The results of that analysis are attached to this letter and summarized below. As described in their report, PHA found a number of substantial deficiencies in the traffic study, including:

- The key intersection of San Pablo Avenue and Stanford Avenue was not analyzed.
- Key roadways were analyzed as intersections rather than corridors, resulting in understatement of traffic impacts.
- There is no analysis of the existing (current conditions) roadway segment performance.
- The traffic study uses using a fixed capacity that is inappropriate and results in an underestimation of the impact.
- Queuing analysis for study intersections along the Powell Street, San Pablo Avenue, and 40th Street corridors are missing.
- Certain trip reduction assumptions are inappropriate, resulting in understated project impacts.
- Potential impact and conflict with existing driveways on Horton Street and Sherwin Ave. have not been analyzed.

52

[1] OPR, Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, January 20, 2016.

- Traffic counts appear to have been omitted traffic from temporarily empty Grifols/Novartis buildings, resulting in an erroneous traffic baseline.
- Mitigation for the Horton St. Bicycle Blvd impacts are unrealistic and unlikely to work.
- The report identified a number of intersections that are expected to operate at LOS E or lower at near-term and cumulative scenarios, however mitigations identified at many of the intersections are infeasible.
- The traffic study has a number of internal errors including lane coding errors, inconsistent trip assignments and generation tables, and missing driveway access.
- Construction impacts are insufficiently assessed.

52 cont.

Lack of Detailed TDM Plan

As discussed in PHA Transportation Consultants comments, attached and summarized above, the DEIR's failure to use the correct methodology has resulted in an understatement of the project's traffic impacts to the bicycle boulevards as well as other peripheral streets, even with the assumed 35% reduction from transit a, pedestrian, and bicycle trips. Mitigating this impact requires a strong Transportation Demand Management (TDM) plan to effect major reduction in trip generation, yet that plan has not yet been created, nor is it even outlined in the DEIR. The DEIR is mute on the plan with the exception of a single sentence in Table V-2 on p. 470 of the DEIR, which states: The proposed project would implement TDM plan that includes bicycle parking, bicycle storage, and electric vehicle charging stations.", and Recommendation 12 on p. 184 (not even a requirement), which states that the TDM plan may potentially include time limits on parking, providing information to residents about bike and transit facilities, monitoring parking demand, designating car share pods, and designating a transportation coordinator. That "recommended" minimal description is the sum total of the TDM plan. The TDM plan has been improperly deferred in this EIR. This issue was litigated in City of Hayward v. Hayward Planning Association (2015), which found a TDM plan acceptable when 1) it was a required mitigation measure, including a mechanism for funding and implementation and 2) it includes specific transit service improvements, specific alternative mode use incentives, and specific parking management requirements. A firm commitment to detailed studies as to how to fine tune the TDM plan also was required. This EIR includes none of these. In that decision, the court ruled that:

53

> "While the trustees have not committed to any particular measure that is specified in the TDM plan, the TDM is not illusory. The plan enumerates specific measures to be evaluated, incorporates quantitative criteria and it sets forth specific deadlines for completion of the parking and traffic study and timelines for reporting to the city on the implementation and effectiveness of the measures that will be studied. The monitoring plan, which is an integral part of the plan, ensures that the public will have access to the information necessary to evaluate compliance with the Trustees' obligations."

In this EIR, the TDM plan is not even required and includes none of the detail necessary to assure implementation or effectiveness. In the *Hayward* court's parlance, this project's TDM plan is illusory.

Other Traffic Assessment Issues

Our NOP comment letter noted that, in addition to local traffic problems, back-up from the I-80 Emeryville off-ramp on I-80 are worsening and are affecting traffic flows on the freeway in general.

54

Therefore we requested that the EIR traffic study must include project and cumulative impacts to the I-80 off-ramps and on-ramps, as well as to main-stem I-80 traffic at peak hours. Impacts to the mainline I-80 from both the project and cumulative traffic are missing from the DEIR analysis and should be evaluated. **54 cont.**

The trip generation estimates – Table IV,C-7 are questionable. The EIR traffic analysis uses a "mixed use" traffic model, but, as described under Project Description Issues, above, the project is essentially a residential development. Please reevaluate the use of the MXD+ model for a residential development. The model also assumes a transit-oriented project. The analysis assumed a 40% reduction in vehicle trips, assuming people will walk, bike and take transit to and from the site. Please provide evidence supporting the use of the model and the 40% trip-generation reduction, based on Emeryville-specific studies. **55**

Our NOP response letter requested that, given the confluence of numerous driveways for all of the Project garages in close proximity to the intersection of the oval roadway and the new 46th Street extension, the traffic analysis should analyze the relative functionality of the roadway system as designed in terms of circulation flow, pattern, and turn or crossing conflicts (bicycle and pedestrian included) as well as its adequacy in regards to stacking and queuing at garages, driveways, and at each turn and stopping point in the roadway. The analysis should identify appropriate forms of signalization, especially at the 45th and 46th and Horton intersections. We also requested that project and cumulative impacts on all intersections leading to I-80 and Emeryville shopping areas also must be evaluated. The DEIR fails to adequately address any of these issues. **56** **57** **58**

A number of the traffic mitigation measures included in the DEIR are so vague as to not assure mitigation. For example, Mitigation Measures TRANS-1, TRANS-2, and TRANS-3 include payment of an impact fee, but does not explain how payment of that fee would reduce or eliminate the impacts that the measure purports to mitigate. That measure also requires the applicant to "work with the City…" to mitigate impacts. Working with the City does not describe or require any mitigation. There is no way to evaluate how or even if this measure would be effective or implemented, respectively. **59**

<u>Air Quality</u>

The DEIR should be augmented to clearly address the following potential air quality impacts:

- The project doesn't appear to be consistent with 25% GHG reduction goal in City's CAP. Why isn't this a criteria of significance (i.e. 25% reduction in per capita GHG emissions)? In addition, the State Office of Planning and Research recently published proposed guidelines proposing that the CEQA threshold of significance for GHGs should be a 15% reduction in average per-capita VMT. Please revise the VMT discussion to address this threshold of significance or the 25% City CAP one, above. **60**
- The DEIR includes no analyses of cumulative emissions impacts, just an assumption that all would comply with BAAQMD standards. Because of the long list of cumulative projects proposed in the City, cumulative-plus-project Air Quality impacts must be calculated. **61**
- The DEIR's dust significance criteria should be expanded to address how dust may affect livability/work-ability of artists' spaces. **62**
- Table IV.E-4 uses an incorrect footage for project's commercial/office space. Please revise. **63**

Climate Change

- The project doesn't appear to be consistent with 25% GHG reduction goal in City's CAP. Why isn't this a criteria of significance (i.e. 25% reduction in per capita GHG emissions)? In addition, the State Office of Planning and Research recently published proposed guidelines proposing that the CEQA threshold of significance for GHGs should be a 15% reduction in average per-capita VMT. Please revise the VMT discussion to address this threshold of significance or the 25% City CAP one, above. **64**
- The sea-level rise discussion on p. 226 is at least a decade out of date- the hydrology section has the more recent levels. Please correct. **65**
- The sea-level rise impacts discussion on p. 227 also is out of date/lower than the current range, which is 3-5 feet or more. **66**

Noise

The DEIR should be augmented to clearly address the following potential noise impacts:

- Please provide evidence that he 55/65 dBA significance criteria will effectively mitigate operational impacts at the 45th Street Cooperative, given that the building requires open windows for ventilation, and residents both live and work there. **67**
- Construction noise impacts of up to 89 dBA at the 45th Street cooperative building would make it impossible for the occupants to work. The typical construction hours relied upon by the EIR as mitigation are not intended to apply to live-work situations. As clearly described by the court in the Berkeley KJOB v. Board of Port Commissioners case, if noise would significantly affect people, relying upon a generic standard cannot be considered to be an adequate criteria of significance. Please assess the potential impacts of 30-40 months of loud construction noise to live-work occupants at the 45th street coop and evaluate the effectiveness of mitigation measures. Please note in the analysis that the building relies entirely on open windows for ventilation. **68**
- Pile driving impacts to the 45th Street coop's residents/workers needs to be specifically addressed if there's a potential that they will be used. **69**
- There's no analysis of the effectiveness of the noise mitigation, just an assumption that they will be effective. There is zero evidence in the EIR that the proposed construction mitigation measures would reduce impacts to a less-than-significant level. Please provide an evaluation of the effectiveness of the identified measures given the 24-hour occupants and necessity to have windows open for ventilation. **70**
- There's no assessment of noise cumulative impacts from construction and cumulative traffic of all of the proposed projects. **71**

Geology

In our NOP comment letter, we requested that the Project Description describe, and Geology section fully evaluate, the project's grading plans, including the quantities of soils proposed to be imported/exported (and potential impacts to dust, air toxics, air quality, traffic, and noise, from excavating and off-hauling materials). This information is still missing from the DEIR. **72**

In addition, the following potentially significant impacts remain unaddressed and need to be added to the DEIR: **73**

- The site-specific potential for liquefaction and subsidence.
- The site-specific geotechnical investigation of the site is impermissibly deferred to mitigation. It is essential to identifying project impacts and mitigation measures, and therefore must be included in the EIR.
- The project foundation design needs to be described and evaluated for geologic impacts.
- The excavation must be described and off- and on-haul impacts addressed (in traffic, noise, greenhouse gas, and air quality sections- currently missing).
- The C-3 plan needs to be done and reviewed in the EIR- absent this information the feasibility and effectiveness of the plan in controlling erosion cannot be determined.

73 cont.

Hydrology/Water Quality

In our Scoping comments, we requested that the project description include a conceptual stormwater drainage and on-site treatment plan in full compliance with City's Provision C-3 LID stormwater requirements, as issued by the California Regional Water Quality Control Board. It is not clear that, under the proposed plan's high development density and impervious footprint, the runoff generated can be effectively treated on-site without adversely affecting the use of the open space/park areas. Despite our request, this issue has not been evaluated in the DEIR, and is impermissibly deferred to future development. **74**

The depth of excavation and footings (i.e. piles or deeper excavations) should be evaluated with respect to migration paths for contaminated groundwater. **75**

Impacts of sea-level rise to the capacity of storm drains to discharge to the Bay also should be evaluated for the anticipated lifetime of the project (Mitigations HYD-1a and HYD 1b). The DEIR should summarize and evaluate the proposed stormwater plans, not defer them. **76**

Hazardous Emissions/Health Risk

As noted in our Scoping comments, and discussed on p. 302 of the DEIR, the DTSC has required (and the Sherwin-Williams Company has filed a deed restriction to the property with respect to residential uses that requires), among other things, a detailed assessment of soil VOC's and petroleum hydrocarbon vapors prior to permitting any residential structures on the site. See Article IV Restrictions and Requirements in the deed restriction. Therefore we requested that the DEIR include a detailed evaluation of the required soil management plan, project compliance with prohibited activities, non-interference with installed remediation measures, potential soil vapor and petroleum hydrocarbon emission hazards, as well as mitigation measures for any such hazards. The importance of this analysis is heightened by ACDEH's comment that the monitoring wells on the property may not be down-gradient of the former USTs of the Chromex property (DEIR, p. 307) and groundwater plumes from the ECI property (DEIR p. 308). Further, no potential vapor intrusion analysis has been done as part of the DEIR, despite that potential impact (p. 315). These analyses have not been done in the DEIR. **77**

In addition the DEIR hazardous materials analysis includes the following deficiencies:

- Hazmat restrictions on the site need to be compared to proposed foundation designs to determine impacts of the project, as well as feasibility. The DEIR includes no information on this issue. It is impermissibly deferred to future study by DTSC. **78**

- Vapor intrusion impacts analysis impermissibly deferred to mitigation.
- The DTSC review of foundation designs has been impermissibly deferred- this review should be done through the CEQA process so that the impacts and mitigations associated with altering the cap on the site's residual contaminated soils can be evaluated.
- Land use covenants are required by Mitigation HAZ-2c, but it is unclear what the purpose of a land use covenant is and how it can mitigate impacts after the mostly residential project has been approved.
- Preparation of the SWPPP and Soil Management Plan (SMP) have been impermissibly deferred to future mitigation – the SWPPP and SMP should be detailed and reviewed for effectiveness as part of this EIR.

78 cont.

Given the numerous deferred and/or omitted analyses in this section, there's no evidence in the DEIR supporting the section's less-than-significant impact conclusions for the hazmat impacts. Please conduct the required analyses based on completion and review of the improperly deferred plans and foundation design, and reconsider the significance of the impacts.

79

Public Services and Recreation

All of the EIR's services/recreation calculations are based on Emeryville's existing average of 1.7 residents/unit. However the project will be required to include a greater number of "family friendly" units than the City's average. Please recalculate all services impacts based on an assessment of numbers of project residents that would occur from the unit-size breakdown proposed as part of the project. This is especially relevant to schools, since the project may have a far higher percentage of children per unit than existing development. The "assessment" of cumulative schools impacts is non-existent- the discussion on p. 359 is a conclusion absent any actual analysis. Please provide an analysis of the total number of new students proposed to be generated by the cumulative residential projects and the total planned new school capacity. Absent this information it is impossible to determine the significance of this impact.

80

81

There is no evidence in the DEIR that the City's Fire Department has reviewed the project plan and commented on its adequacy with respect to fire protection. There is just no analysis of the actual project's impacts on fire protection, just a conclusion that because it would be required to meet codes, there would be no impact. Please revise the EIR with the Fire Department's review of the plans. Please also include an assessment of the cumulative impacts of the numerous proposed projects on Fire Department service and equipment needs.

82

As described in the Policy Compliance discussion earlier in this letter, according to the calculations in this section, the project doesn't meet City parkland standard, yet EIR inexplicably and arbitrarily finds this impact to be less than significant. The City's park standard is 3 acres/1000 residents, the City is already deficient in meeting this standard, and the project would provide 2.08 acres for its (probably low- see above) 923 residents and 320 employees. This would exacerbate the existing deficiency, and would be a significant impact.

83

Utilities

The DEIR is missing a cumulative water supply analysis. Please provide a calculation of proposed cumulative water demand and a discussion of how that demand would be met, especially in drought years.

84

Visual Resources and Wind

The visual resources section has the following deficiencies:

- The DEIR is missing a viewpoint from 45th Street at Horton. This viewpoint is critical to evaluating views from the 45th Street Cooperative buildings and is likely the viewpoint from which impacts to residents would be greatest. Please add a simulation from this viewpoint and re-assess the project's impacts. **85**
- Compliance of the project with many of the City's General Plan urban design elements listed under Regulatory Setting (p. 380) is not addressed in the EIR. Policy compliance is an essential element to determining visual impact significance. Please add a discussion of the project's compliance with Policies LU-G-8, UD-G-12, UD-P-3, UD-P-13, UD-P-33, UD-P-37, and UD-P-39, all of which the project appears to conflict with. **86**
- Light and glare impacts not adequately evaluated. The discussion of this topic on p. 395 includes no actual impact analysis. Instead it just concludes that compliance with Municipal Code requirements would reduce the light impact to less than significant. CEQA requires evidence supporting conclusions; this "analysis" includes no evidence and is therefore unsupported and arbitrary. Please prepare a light and glare study of the buildings, indicating the nighttime appearance of the facility in various public views. **87**
- Shadow impacts to project's open space and park not considered significant, but should be. The DEIR's shadow analysis (p. 416) inexplicably fails to consider shading impacts to the public park to be developed along with the project. as significant, despite the shading conflicting with City policies (i.e. LU-G-8). Please revise to consider this impact as significant or explain why it is not significant. **88**
- Visual impacts appear to be significant on their face- unclear why EIR says all visual impacts would be less than significant. For example, on p. 418, the DEIR states that because views of the hills are not entirely blocked, cumulative impacts would be less than significant. This entirely ignores the effects on local views. Comparing views on Figure IV.M-29, the average person sees a massive change, where open views are replaced with a dark, boxed-in canyon perspective. Similarly, as shown on Figure IV.M-31, massive structures blot out much of the sky and all of the hills in views from the Bay Street mall area. Most hill views also are eliminated from views from the 40th Street Bridge, as shown on Figure IV.M-32. All of these changes can be construed as significant adverse impacts. **89**

As described in our NOP comment letter, residents have noted that the taller Novartis/Grifols buildings on Horton Street north of the site have created a canyon effect with respect to wind (and shade). The proposed project buildings must be fully evaluated for the potential to create wind tunnels on Horton Street as well as on open space internal to the project some of which is, in effect, City park land. **90**

Project Objectives and Alternatives

Project Objectives

CEQA Guidelines Section 15124, Subsection (b) emphasizes the importance of a clearly written statement of objectives. Compatibility with project objectives is one of the criteria for selecting a reasonable range of project alternatives. However, objectives cannot be so narrowly construed as to reject feasible alternatives that reduce project impacts. This DEIR identifies objectives on pp 43-44. **91**

- The applicant's objective of "organized around a central plaza" is inappropriate and should be deleted. This objective's sole purpose appears to be to reject other alternative layouts, and it even conflicts with the applicant's own "Lennar Alternative."
- While the applicant's objective of achieving a return on their investment is permissible, the DEIR's conclusions on market return on investment for each alternative are entirely unsupported by any evidence or fact. This conflicts with guidance in the *Sierra Club v. Contra Costa County* (*10 Cal.App.4th 1212*) decision. **92**

Range of Alternatives

CEQA Guidelines (Section 15126.6) requires that EIRs consider a range of reasonable alternatives that achieve most of the project objectives, even if they cost more than the project (Guidelines Section 15126.6 a-c). The project alternatives addressed in the EIR represent an inadequate range of alternatives because they do not mitigate many of the project's significant impacts, as required by CEQA. This problem is exacerbated by the fact that the DEIR fails to identify many of the significant impacts, as discussed in the above comments. **93**

In addition, the sole alternative that would significantly reduce impacts (the Base Zoning Alternative) is so vaguely described that it its impacts to critical issues such as visual quality, shadows/light availability, land use, and construction effects (e.g., does it have a shorter construction period, less excavation, etc.?) cannot be evaluated. **94**

Similarly, since the commissioning of the EIR, Lennar has submitted two alternative plans (the Lennar alternatives). Neither of these indicate detailed traffic flow or garage locations. These features need to be identified and a detailed analysis of the traffic, noise, and air quality impacts on each of the specific streets adjoining the project. **95**

The EIR identifies the Reduced Density alternative as the Environmentally Superior Alternative, however, given that that alternative has 378 units vs 270 units for the Existing Base Zoning Alternative, it is unclear why the Existing Base Zoning Alternative is not the Environmentally Superior Alternative. Given the paucity of description of the Base Zoning Alternative, the overall lack of impact analyses in the Alternatives chapter, and the single paragraph "discussion' of the Environmentally Superior Alternative, it is impossible for the reader to understand how this conclusion was arrived at. **96**

Additionally, as described earlier in this comment letter, the project itself, as well as all of the alternatives other than the Base Zoning Alternative, appear to be infeasible on their face, due to its failure to comply with requirements for at least half of its assumed bonus points. In this situation, **97**

since CEQA requires alternatives (and the project) to be feasible, the Base Zoning Alternative (or a similarly reduced density project) should be considered as the project, and reduced alternatives developed to that project. **97 cont.**

Alternatives' Impact Assessment

The alternatives section of the DEIR also is inadequate because it fails to include an adequate description or evaluation of the potential impacts of the alternatives. As summarized below, most of the alternatives' impact assessments are so vague and generic that it is impossible to discern the relative merits of the alternatives. This fails to meet even the most minimal CEQA requirements for alternatives presented in Guidelines Section 15126.6(d) *"The DEIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project".*

The DEIR has no analyses of traffic or associated noise or air quality impacts of the project other than simple trip-generation discussions. Therefore it is impossible to identify reductions in impacts of the alternatives on the streets, including the bicycle boulevards. "Similar to, but less severe than proposed project trips" (see, for example, p. 482) does not constitute an impact analysis with any useful information for either the public or decision-makers. Another example is each of the alternatives' Air Quality and Greenhouse Gas Emissions "analyses", which consists of a simple statement that the alternative would " generate air pollutants that could violate air quality standards, as would the proposed project." (see for example, p. 487) or, for GHGs, "would be under the thresholds". Again, this is insufficient information to meet CEQA's requirements for the alternatives analysis, s it does not allow the reader to discern to what degree impacts would be reduced. **98**

The geotechnical "analyses" for the alternatives just say impacts would be similar, with no apparent effort made to discern any differences.

The public services and utilities discussions make no effort to identify the degree of reduction in demand for those services and utilities.

The visual impact analyses for the alternatives include no actual analyses of the differences in visual quality represented by the each of the alternatives.

<u>Conclusions</u>

As detailed above, the DEIR fails to meet even the most basic CEQA requirements for good faith analysis and disclosure. The numerous deficiencies, including a defective project description, inadequacies in the baseline and impacts analyses, and improperly assessed and rejected alternatives, cannot be cured by simple responses to comments. Contrary to the erroneous information provided to you by your Planning Director at the February 25, 2016 DEIR hearing, CEQA allows for, and, in fact, requires, recirculation of a revised draft EIR in cases such as this, where wholesale revisions of the DEIR are required to correct deficiencies identified in the public comment period (per CEQA Guidelines Section 15088.5). We look forward to the opportunity to review a revised recirculated DEIR that corrects the deficiencies identified in this letter and by other commenters. **99**

Letter
B2
Cont.

Please feel free to contact us if you have any questions regarding these comments. The 45th Street Artists' Cooperative looks forward to working with the City to assure that the public and decision-makers are provided with a comprehensive environmental impact report. **99 cont.**

Sincerely

Richard Grassetti
Principal
Grassetti Environmental Consulting

Attachments:
PHA Traffic Peer Review Report
NOP response letter (including January 20 Study Session Letter)

Letter
B2
Attach. 1

PHA Transportation Consultants
2711 Stuart Street Berkeley CA 94705
Phone (510) 848-9233
Web www.pangho.com

February 29, 2016

Richard Grassetti
Grassetti Environmental Consulting
Via email:

Re: Peer Review – Sherwin Williams Site Traffic study

Dear Mr. Grassetti:

100

In response to your request, and on behalf of the P.A.R.C. neighborhood group. PHA Transportation Consultants has conducted a peer review of the traffic study prepared by Fehr and Peers Transportation Consultants for the above referenced mixed-use development in Emeryville. This study forms the basis of the DEIR transportation analysis, and comments below also apply to the DEIR. The purpose of this review is to evaluate whether or not the traffic study has adequately identified the potential traffic impact of the proposed project, and provided reasonable and feasible mitigation to minimize project impact.

Our review indicated that the study underestimated the overall traffic impact of the project due the use of inappropriate LOS analysis methods; neglected to analyze a crucial street intersection and several street segments that are expected to receive the bulk of the project related traffic; and failed to provide meaningful mitigation.

Our comments are organized in three parts. Part I focuses on the study's scope, methodology, and assumptions. Part II reviews the adequacy the proposed mitigation. Part III discusses the technical aspects of the report the report that, in our professional opinion, need clarification and/or further analysis. Our comments and recommendations are as follows:

Part I: Scope, Assumptions, and Methodology Issues

101

1. <u>Key intersection is missing:</u>
   While the traffic study evaluated 30 street intersections, it failed to include the San Pablo Avenue/Stanford Avenue intersection. This is a crucial intersection as it

controls east-west and north-south traffic flows on San Pablo Avenue and Powell Street. These two streets are expected to provide regional access to and from the project site. The study indicated at least 10% of the commercial and another 10 % of the residential traffic is expected to travel to the from the project site via this intersection. As such, this intersection should be analyzed in the study. **101 cont.**

Recommendation:
Include this intersection in the study and evaluate traffic LOS for all study scenarios, existing, near-term, and cumulative conditions.

2. <u>Inappropriate intersection LOS analysis method:</u>
Powell Street, San Pablo Avenue and 40th Street are major traffic corridors in the area, and as such, intersections along these three corridors should be analyzed as corridors. Intersections along these corridors should be evaluated based on travel speed instead of Volume-to-Capacity V/C and delays. Analyzing these intersections as independent intersections based on V/C and delay produces better than actual operation (LOS) in the field because it assumes an average of 30 mph travel speed in the calculation. In reality, travel speeds through these intersections are much lower during peak hour conditions. Intersections along these three corridors are Alameda County Congestion Management Agency (ACCMA) designated Tier- two roadways and have their own LOS standards and criteria of significant impacts. ACCMA uses speed to determine intersections and corridor LOS. **102**

Recommendation:
Re-evaluate study intersections along these three corridors as corridors and not as independent intersections. Determine intersection and corridor performance (LOS) based on travel speed and not V/C and delays.

3. <u>Inappropriate street segment LOS analysis method:</u>
   a. Chapter 7, Tables 23 and 24 of the traffic report summarizes roadway segment peak-hour performances for 2025 and 2040. However, there is no analysis of the existing (current conditions) roadway segment performance.

   b. The report used a fixed roadway segment capacity in the analysis. This method is inappropriate and results in an underestimation of the impact. Lane and roadway capacities are controlled by speed. Higher speed results in high capacities, such as freeway lanes, which have capacities of 2,200 vehicles per hour/lane at 60 mph per hour speed. For urban arterial streets, lane capacities are about 1,500 vehicles per hours at 30 mph per hour or so speed. In the case of the study street segments along the Powell Street, San Pablo Avenue and 40th Street corridors. Speeds are lower than 30 mph during peak-hour conditions. Therefore, using a fixed capacity would lead to a better than actual roadway performance (LOS). **103**

Recommendations:

a. Add roadway segment LOS analysis for existing conditions with and without the project related traffic.
b. Re-evaluate roadway segment LOS analysis for all study scenarios with capacities based on speed rather than fixed capacities, including segments of 1-80 freeway between Ashby on-off ramps and University Avenue on-off ramps.

103 cont.

4. Missing queuing analysis:
The report mentions that there was a queuing problem at one of the study intersections but there were no queuing analysis for other study intersections along the Powell Street, San Pablo Avenue, and 40th Street corridors. Based on our observation in the field, traffic along these three corridors moved slowly with long vehicle queues during the commute hours, affecting adjacent intersection operation along the corridor. This condition is particularly evident at the two Powell Street intersections near I-80 freeway ramps and Christi Avenue due to short spacing and high vehicle volumes. Without a queuing analysis for each of the affected intersections, traffic operation and project impacts cannot be adequately assessed.

104

Recommendation:
Add vehicle queuing analysis for all traffic study intersections, identify intersections with vehicle queuing and spillover problems and develop mitigations.

5. Project trip generation analysis:
a. Table 7 Trip generation analysis assumes an overall 35% trip reduction because of the mixed-use nature of the project. The reduction includes 10% internal trips, 15% external walk and bike trips, and 20% public transit trips. This is slightly higher than the 2010 Bay Area Census Statistics for Emeryville but is within a reasonable range. However, we consider 20% public transportation trip reduction for Saturday is high since most people do not work on Saturdays and would not use public transportation but rather drive their own vehicles to go places. Further, while the proposed project would have small retail and restaurant components, they would not necessarily generate much peak-hour traffic. Therefore a 10% internal captured trip may not be an appropriate peak-hour traffic deduction.

105

b. The report indicates that the project trip generation is calculated using MDX+ model, however, the trip generation from Table 7 appears to be directly from the ITE rates with deductions for public transit, walk and bike trips and internal capture etc.

Recommendation:

a. Adjust Saturday trip reduction for public transportation and revise the trip generation for Saturdays, and internal capture rate for the peak-hour traffic. If the difference in trips is significant, and that Saturday intersection traffic

operations are on the borderline of significant impact, revise intersection LOS analyses as well.

105 cont.

b. Clarify whether or not MDX+ model was used for the project trip gnereation analysis. Please support the use of that analysis for this project land use mix.

6. Potential impact and conflict with existing driveways:
There are a number of existing driveways on Horton Street, Sherwin Avenue, Hubbard and Halleck Street near the proposed project site. While the study evaluated the project access driveways, there is no analysis or discussion on whether or not these driveways will have turning movement conflicts with existing driveways. There are also several driveways in the immediate area on Sherwin Avenue and Horton Street across from the project site, including the 45th St. Artists' Cooperative parking lot driveway. The area surrounding the project site has a number of warehouses and loading areas, however, the repot neglected to analyze the potential conflicts among loading/unloading trucks, passenger vehicles, blocked streets and driveways.

106

Recommendation:
Identify existing driveways and building lines on Horton and Sherwin Avenue across street from the project site to evaluate whether or not the proposed project driveway will have conflict or affect exiting driveway operations. These include driveways to 1500 Park Warehouse, 45th Street Artist Coop, Horton Lofts, and the Blue Star Corner. Evaluate truck activities in the area and the potential impact on traffic flow in the area.

7. Traffic Counts:
A number of buildings in the Horton Street, 53rd Street, and Stanford Avenue are currently vacant and/or under renovation and unoccupied, and traffic to and from these building may not have been captured in the traffic counts conducted in January 2015 (This includes several of the Novartis/Grifols Buildings, among others). If that is the case, the study may have understated the existing traffic conditions.

107

Recommendation:
Identify the locations, size and use of these vacant, unoccupied buildings, discuss how traffic to and from these buildings are treated and evaluated in the study.

8. Parking:
According to the project rip generation analysis, the site will generate less than 300 trips during peak-hour and about 3,600 trips on a daily basis. The city's parking requirement ranges between 434 spaces (based on 33% less than demand) and 713 spaces (based on 10% more than demand). However, the site shows more than 900 parking spaces, which is well exceeding the city parking requirement. This may

108

encourage more driving and less use of public transit and other alternative mode of transportation. 108 cont.

Recommendation:
Discuss why that many parking spaces are needed.

9. Lack of analysis of potential impacts on Beach Street:
Beach Street extends from Halleck Street, provides a direct connection from the project site to freeway I-880 via Wood Street and 7th Street. Project traffic may use this connection to travelling to and from the south. The potential impact on this connection should be evaluated. 109

Recommendation:
Evaluate and discuss the potential project traffic on the connection.

Part II: Mitigation Issues

1. Unrealistic mitigation for Horton Street:
   c. The report (Table 17) identified significant traffic impacts on a number of streets including Horton, 45th, and 53rd. These are bicycle boulevards on which the project is expected to increase traffic volumes by more than 2%, which is the threshold for significant impact. The traffic report recommended a series of mitigation such as speed humps, traffic diverters, narrowing part of the traffic lanes etc. These mitigations generally would work in most situations but not likely in this case. Based on reviews of the traffic volumes on these streets, about 3,500 or less vehicles per day (VPD), suggests that most of these traffic would have either origins or destinations to these streets and would have to use these streets regardless. The traffic study/DEIR's recommended mitigation would likely slow down traffic further, creating backups, and/or forced them to use adjacent streets and become problems for other streets. 110

   d. The project identified significant traffic impact on Hollis Street/45th Street intersection under the existing with project scenario as the intersection performance would drop to LOS E designation and recommended installing traffic signals. However, since the City of Emeryville does not have a LOS standards or significant criteria, will the traffic signal be installed at the location?

Recommendations:
   a. Re-consider other mitigation or indentify measures that would better protect bicyclist on these streets.

b. Identify funding for installing traffic signals and/or other types of mitigation should the city and/or the project proponent decided not to pay for installing the traffic signal. **111**

2. <u>Lack of real mitigation for intersection LOS deficiencies for future traffic scenarios</u>. The report identified a number of intersections that are expected to operate at LOS E or lower at near-term and cumulative scenarios.

   With the near-term scenarios, four of the study intersections are expected to operate at LOS E or worse:

   #1 Powell St./I-80 Frontage Rd.
   #5 Powell Street/Christie Ave.
   #16 Hollis St./45th St.
   #24 Horton/40th Ave.

   With the cumulative scenarios, six of the study intersections are expected to operate at LOS E or worse: **112**

   #1 Powell St./I-80 Frontage Rd.
   #5 Powell St./Christie Ave.
   #8 Powell St./Hollis St.
   #16 Hollis St./45th St.
   #24 Horton St./40th Ave.
   #27 San Pablo Ave/40th St.

Of all the above intersections with poor LOS ratings, only the Hollis St./45th St. intersection impacts could be mitigated by installing traffic signals. All other intersections are built-out, or already signalized and therefore the project's impacts on them cannot be mitigated. Updating signal timing is not likely to work since traffic signals for these intersections are likely fully actuated and are operating at optimal timing plans. Paying transportation impact fees would not necessarily improve capacities at these intersections. Motorists would still have to suffer longer delays. If the study intersections, particularly those along 40th St. San Pablo Avenue, and Powell Street were evaluated as corridors as discussed previously, more study intersections would likely operate at deficient conditions.

Part III: Miscellaneous issues that need clarification/revision

1. Parking for Parcel A:
   Parcel A (existing building) shown in Figures 2 and 3 for development options A and B, does not seem to have a parking garage. Would people in this building park their vehicles on the street or will they be accommodated in the garage at other parcel when the project is completed? Will this change if the site is parcelized? Neither Figure 2 nor 3 shows vehicle circulation or driveway access for this building. **113**

   Recommendation:
   Clarify the parking situation for parcel A, which according to Table 1, Development Summary is a 74k sf office building. Also, clarify whether or not the traffic from this existing has been included as part of the project trip generation.

2. Parcel C1 driveway access:
   Parcel C1, according to the Table 1, Development Summary, would be developed with residential units with parking garage for both development options A and B, but no vehicle circulation or access driveways for this parcel are shown for development option B, on Figure 3. How do residents from this parcel access their building? **114**

   Recommendation:
   Clarify vehicular circulation and driveway access for this parcel under development option B and review if it would change the site traffic distribution and assignment

3. Lane coding errors in LOS analyses:
   Lane configuration for the northbound approach at the Powell St./Christie` Ave. intersection should be one left-turn and one shared left-thru-right turn lane. The eastbound approach at the Powell St./Hollis St. intersection should be one left-turn, two thru, and one channelized right-turn lane. **115**

   Recommendation:
   Revise lane configuration for the two intersections. Double-check other intersections lane configuration for potential coding errors. Revise LOS calculations as appropriate.

4. Inconsistent project trips in trip assignment and trip generation summary table:
   The project trip generation analysis in Table 7 indicates 120 a.m. inbound trips and 159 outbound trips. However, the driveway volumes for trip assignment on Figure 11B are smaller, 101 and 132 respectively for option A and 106 and 133 for option in Figure 12B. **116**

   Recommendation:
   Double-check driveway volumes in trip assignments against trips in Table 7 Trip Generation Summary. Also double-check driveway volumes for PM and Saturday for consistency and revise as appropriate.

5. <u>Insufficient discussion of construction traffic Impacts:</u>
   While the study indicated the construction impact will be smaller than the impact of the project itself and construction worker parking would be accommodated on the site. There is no discussion on the number of trucks travelling to and from the site, the directions and routes of these trucks would use, the potential debris left on the streets, the number of construction workers working on the site on a daily basis, and the potential pavement impacts. **117**

   Recommendation:
   Provide a detailed discussion and analysis on construction impact that include the number of construction workers, trucks, pavement impact, and how clean up of the debris from trucks would be handled.

In summary, because of the omission of critical intersections in the study, the lack of an approved projects scenario, a short-term traffic scenario analyses, and some potentially questionable traffic count data and trip generation assumptions, the report may have underestimated the potential traffic impact of the project, and therefore is inadequate to determine whether or not the project would have a significant impact to traffic. It should be revised as recommended above. **118**

Please feel free to contact me if you have any questions about our review.

Thank you

Sincerely

Pang Ho AICP
Principal

GECO
Grassetti Environmental Consulting

Letter B2
Attach. 2

Miroo Desai, AICP
Senior Planner
City of Emeryville
1333 Park Avenue
Emeryville, CA 94608

February 17, 2015

SUBJECT: COMMENTS ON NOTICE OF PREPARATION FOR SHERWIN WILLIAMS DEVELOPMENT PROJECT ENVIRONMENTAL IMPACT REPORT

Dear Ms. Desai;

Grassetti Environmental Consulting (GECo) and Light Planning have been retained by the 45th Street Artists' Cooperative (Cooperative) to assist in their participation in the City's CEQA process for the Sherwin Williams Development Project. On behalf of the Cooperative, we are submitting these comments on the Notice of Preparation (NOP) for the project EIR. We had previously submitted a detailed letter on project's design issues and compliance with the City's plans and policies for the Council's consideration in the January 20 study session, which we have attached to this letter. Issues raised in that letter also are comments on the NOP. Our comments on the EIR scope are presented below.

119

Unstable/Incomplete Project Description

As detailed in our Study Session letter (attached) and summarized under "Plan Compliance Issues" below, the proposed project appears to conflict with a number of City policies, including density provisions. In addition, City staff has not deemed the project application to be complete. Further, the applicant continues to revise the project, substantially changing the open space and circulation days before the most recent City Council Study Session. For these reason, the project description appears to be unstable and incomplete. It is highly likely that the project will need to be substantially revised, with possible changes to layout, open space, and density. It would be inappropriate for the City to close the comment period on the NOP prior to the application being complete because the public and responsible agencies could be denied essential information relevant to commenting on the project. In addition to the items noted in staff's incomplete letter of October 24 email to the applicant (incomplete subdivision and phasing information), the current Preliminary Development Plan (PDP) is lacking the following items:

- The schematic submittals are of insufficient detail and of too small of a presentation scale for decision makers to make informed decisions regarding the development proposal. Full-sized scalable drawings, identifying uses and occupancy types, including floor plans and full building sections with roof-top equipment and penthouses, as well as schematic elevations also are needed to identify impacts.

- Graphic displays of site areas devoted to private and common open space allotments, and mandatory 10% site landscaping areas for each created parcel as well as calculations of net project site area.
- Visual simulations of building envelopes and massings in context with existing and proposed conditions.
- Sun and shading studies
- Assessment of visual and shading effects of roof-top equipment and penthouses should also be included
- Calculations of floor area of parking garage and access drives.
- A Transportation Management Plan specifically geared to reducing and managing automobile trips to and from the site as a part of the application. Given the high total parking allowances and significant potential trip generation impacts of the project, appropriate site layout and circulation system design may be dependent upon such a Plan.
- Project phasing is not addressed.

Moreover, because the project is to be subdivided into individual parcels that may be separated and sold the project application should include a Tentative Map (TM) showing lot boundaries as is required as part of a PUD submittal (Section: 97.1005.E). The map should include all appropriate drainage, utility, cross access and maintenance agreements necessary to maintain comprehensive functionality of the project as a master development following potential parcel separation. The TM should also demonstrate how each individual lot would comply with requisite setback, height, landscape and density and intensity standards, among others, of the General Plan, Zoning Ordinance and other governing regulations as stand alone developments after potential sale or conveyance and separation. Reciprocal arrangements for access to 'residential amenities' should also be demonstrated, and permanent parking allotments encoded for each individual parcel's usage. The Map should also indicate whether sufficient sanitary sewer and waste-water treatment capacity and other public utilities exist to serve the site. **119 cont.**

Therefore we are requesting that the City suspend CEQA review of the proposed project until theses issues have been worked out and the development application is complete. Moving forward with a potentially infeasible project renders the CEQA process meaningless, and skews alternatives such that they respond to a larger project than may even be permissible. As noted in our attached letter, because of these deficiencies, it is premature to start the CEQA process. As the court stated in County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 192- 193, 139 Cal.Rptr. 396, "[o]nly through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal ... and weigh other alternatives in the balance. An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." Thus, "[t]he defined project and not some different project must be the EIR's bona fide subject." (Id. at p. 199, 139 Cal.Rptr. 396.) Without the information described above, the proposal's benefits simply cannot be meaningfully balanced against its environmental costs.

<u>Plan Compliance Issues</u>

The proposed floor area ratios, building heights, and layout of streets do not conform to Park Avenue District Plan guidelines and standards. The EIR should describe and analyze the Project's conformance with those specific guidelines and limitations as well as its conformance with all other policies, goals and standards of that District Plan.

In discussing the Project's conformance with City plan's and policies especial attention should be given to the project's adherence to building bulk, tower spacing, sky exposure and uninterrupted sunlight policies of the Urban Design Element and Zoning Ordinance.

The EIR should address the Project's conformance with setback, open space, landscaping, building separation, density and other requirements for residential usage as well as calculations of net lot acreage, both before and after potential and anticipated land subdivision.

The EIR should examine the project's conformance with the Bicycle Plan particularly in terms of placement and design of bicycle paths with respect potential conflicts with project and cumulative traffic hazards on Horton Street and other surrounding streets.

Policy T-P-3 of the Transportation Element of the General Plan states that a Quality of Service Standard shall be developed and used by the City to measure transportation performance of projects. The development of said standard is identified in the General Plan work plan as a 0 – 5-year action item. In the absence of the QOS standard, the City lacks an appropriate standard for measuring transportation performance as mandated in its General Plan. The EIR should explain how and why the Project approval process should go forward until such time as City standards are enacted by which its transportation impacts could be analyzed and measured. Any alternate metrics utilized for analyzing transportation impacts should be spelled out and the rationale for their substitution should be presented. The analysis also should evaluate the Project in terms of General Plan policy T-P-5, minimizing Vehicle Miles Traveled, T-P 62 regarding Project loading space, and other Parking and Traffic Demand policies.

119 cont.

The EIR should explain why the Project should be considered mixed-use rather then essentially residential (see discussion in attached Study Session comment letter). If the project is determined to be a residential one, then it should be evaluated as such in the EIR for compliance with provisions of the City's zoning ordinance and General Plan.

The EIR should assess the Project's impacts on the City's ability to meet targeted share of affordable housing, per the City's Housing Element and its regionally designated housing allotment.

Finally, as discussed above, the EIR should evaluate the proposed plan in light of the fact that parcels may be sold off separately, such that each parcel includes adequate open space, service and utility provision, and conformance with other applicable City land use and development standards.

<u>Cumulative Impacts</u>

The EIR's traffic, noise, air quality, aesthetics, wind, shading, and health risk analyses should be evaluated in the context of cumulative impacts of the many reasonably foreseeable, planned, entitled, or under construction buildings in the area. Cumulative impacts should consider both construction and operational effects on these resources. Section 15130 of the CEQA guidelines provide that the cumulative impact assessment may either use the listing approach, or projections from local or regional planning documents. Because of the number of specific projects that are planned, approved, or under construction, the former method would be most appropriate. Use of the plan method would lead to an inaccurate assessment of short- and mid-term cumulative impacts, as it would not reflect actual proposals. For the long-term cumulative impacts, we recommend that a combination of the list and plan approaches be used, where known projects in the pipeline are addressed as a list and long-term planned buildout also is considered.

Projects in the pipeline include but are not limited to:

- The Novartis Master Plan
- EmeryStation West & Emeryville Transit Center (59th & Horton)
- Parc on Powell (Sanford/Powell & Hollis)
- EmeryStation Greenway (58th & Hollis)
- Pixar Warehouse (5000 Hollis)
- Emeryville Center of Community Life (47th & San Pablo)
- Potential replacement of the Banker Marks building bounded by Park, Sherwin, Horton & Hubbard Streets
- Restoration Hardware 40th/Hubbard project

Construction Impacts

The EIR should evaluate the full suite of potential construction impacts, including noise, air quality, traffic, parking, and health risks. Because construction will occur over 5 years or longer, temporary impacts should not be considered less than significant based on their impermanent nature, and should be fully evaluated and mitigated.

Specifically, at a minimum the EIR should address:

- Construction access and truck loading/unloading. As mitigation, delivery of construction materials by rail should be required.
- Construction traffic blockages on Horton and Sherwin, and attendant impacts to emergency response.
- Construction dust emission impacts to health and to the ability for artists to conduct their work (much of which requires a dust-free environment), especially in light of the full-time live-work occupancy of the 45th Street Artists' Cooperatives, and the fact that that building 's only ventilation is from opening windows and skylights.
- Construction noise impacts to the full-time occupants of the 45th Street Artists' Cooperative. The analysis should consider specific physical conditions such as noise permeability of 45th Street building windows in identifying impacts and mitigation measures. It may be necessary to retrofit the 45th Street building with double pane windows and air conditioning before the start of construction of the Project. Note that the City's noise ordinance assumes that residents are not home during the work-day – in this case, they would be, resulting in potentially significant impacts to home and work lives of residents.
- Please note that residents have previously experienced some similar noise and air quality impacts during the remediation of the site, and would be considered experts under CEQA (per Oro Fino v. Eldorado County and Berkeley KJOB v. Board of Port Commissioners decisions).
- Heath risks associated with potential hazardous materials in construction dust and vapors (from VOC (hydrocarbon) vapor emissions)

119 cont.

Public Services/Utilities

The EIR should evaluate the impacts of the proposed project and cumulative development on police and fire services, water supply, sewage treatment, storm drainage, schools, parks, and energy infrastructure. Note that General Plan compliance is not proof of a less-than-significant impact to

these resources.

Growth Inducement

The 100-unit per acre density proposed for the project is greater than any other Emeryville project. The EIR should evaluate the potential growth inducing impacts of the precedent that would be created by permitting this additional density at this site.

Traffic

As noted above, absent adoption of a Quality of Service Standard by the City, it is not clear how this impact can be adequately addressed in the EIR. At a minimum, however, the following items should be included in the assessment.

In addition the quantified trip generation and traffic volume projections, analysis of traffic and circulation should address impacts associated with roadway system design and functionality within the Project as well as on streets and roadways external to it. The EIR also should assess the Project's impacts on flow, distribution patterns and overall functionality of the proposed roadway extensions within the Project as well as on streets and roadways external to it.

Given the confluence of numerous driveways for all of the Project garages in close proximity to the intersection of the oval roadway and the new 46th Street extension, the traffic analysis should analyze the relative functionality of the roadway system as designed in terms of circulation flow, pattern, and turn or crossing conflicts (bicycle and pedestrian included) as well as its adequacy in regards to stacking and queuing at garages, driveways, and at each turn and stopping point in the roadway. The analysis should identify appropriate forms of signalization, especially at the 45th and 46th and Horton intersections. Project and cumulative impacts on all intersections leading to I-80 and Emeryville shopping areas also must be evaluated.

119 cont.

The EIR should consider the implications and potential impacts on traffic circulation of the proposed Horton Avenue traffic diverters (and other traffic calming measures), including potential to divert through traffic on Horton into the Project driveways. It also should address Project and cumulative traffic volumes both within the internal Project circulation system as well as the surrounding system of streets. Potential impacts of project traffic with and without the planned Horton Avenue diverters also should be addressed.

In addition to local traffic problems, back-up from the I-80 Emeryville off-ramp on I-80 are worsening and are affecting traffic flows on the freeway in general. Therefore the EIR traffic study must include project and cumulative impacts to the I-80 off-ramps and on-ramps, as well as to main-stem I-80 traffic at peak hours.

CEQA has recently been amended to include a phased-in requirement that EIRs consider the project's impacts on vehicle miles traveled, as well as levels of service and the Quality of Service metric required by the City's General Plan. Please include each of these metrics in the EIRs traffic section.

Hydrology/Water Quality

The project description should include a conceptual stormwater drainage and on-site treatment

plan in full compliance with City's Provision C-3 LID stormwater requirements, as issued by the California Regional Water Quality Control Board. It is not clear that, under the proposed plan's high development density and impervious footprint, the runoff generated can be effectively treated on-site without adversely affecting the use of the open space/park areas. This issue should be fully evaluated in the EIR.

The depth of excavation and footings (i.e. piles) should be evaluated with respect to migration paths for contaminated groundwater.

Impacts of sea-level rise to the capacity of storm drains to discharge to the Bay also should be evaluated for the anticipated lifetime of the project.

Geology

The Project Description should fully evaluate the project's grading plans, including the quantities of soils proposed to be imported/exported (and potential impacts to dust, air toxics, air quality, traffic, and noise, from excavating and off-hauling materials).

Hazardous Emissions/Health Risk

Potential health risks to neighboring residents/workers to possible hazardous dust and to emissions from construction trucks and project traffic should be carefully evaluated. A full health risk screening should be conducted for both construction and operation of the project, considering the 24-hour/day occupancy of nearby buildings, and reliance on windows/skylights for ventilation. Project construction equipment and haul trucks should be required to be natural gas powered to reduce the health risks associated with diesel emissions. In addition, CO concentrations must be conducted at all nearby intersections. **119 cont.**

The DTSC has required and the Sherwin-Williams Company has filed a deed restriction to the property with respect to residential uses that requires, among other things, a detailed assessment of soil VOC's and petroleum hydrocarbon vapors prior to permitting any residential structures on the site. See Article IV Restrictions and Requirements in the deed restriction. Therefore the EIR must include a detailed evaluation of the required soil management plan, project compliance with prohibited activities, non-interference with installed remediation measures, potential soil vapor and petroleum hydrocarbon emission hazards, as well as mitigation measures for any such hazards.

Aesthetics

The EIR must provide full photo-simulations of the proposed buildings as viewed from Horton and Sherwin Streets. Photo-simulations also should include the approved 150- and 200-foot towers on the Novatris parcel, as well as other relevant cumulative projects. These are essential for the public and decision-makers to fully understand project visual impacts in context.

Shadows, Solar Access, and Wind

The 45th Street Artists Cooperative relies on daytime natural light for living and working activities. In addition, the Cooperative is investigating the feasibility of a plan to install solar panels on the building to reduce energy consumption. Therefore it is imperative that the EIR fully evaluate the proposed project's impacts on shading and ambient lighting to all units in the 45th Street building,

as well as to rooftop skylights and photovoltaic potential.

Residents have noted that the taller Novartis/Grifols buildings on Horton Street north of the site have created a canyon effect with respect to wind (and shade). The proposed project buildings must be fully evaluated for the potential to create wind tunnels on Horton Street as well as on open space internal to the project some of which is, in effect, City park land. Cumulative wind and shading impacts of the propose project plus the permitted towers on the adjacent Novartis site also must be considered.

Alternatives

The proposed Sherwin Williams PUD is an excessively large and dense project. The residents of the 45th Street Artists' Cooperative are requesting that substantially reduced density and reconfigured site plan alternatives be included in the EIR to reduce and avoid its impacts on the surrounding neighborhood, as well for its own inherent functionality and for conformance with City of Emeryville Plans, Policies and Development goals.

Towards that end, the 45th Street Artists' Cooperative, working with other neighborhood residents, have developed a realistic set of conceptual alternatives that we are requesting be evaluated in the EIR (as opposed to the applicant's theoretical site-stuffing exercise). These are shown in the attached figures. These alternatives were reviewed by the City's Park Avenue District Advisory Committee on February 11, 2015. The Committee had positive responses to the overall design, building placement, reduced heights, cut-through of the existing building, and reduced density.

The EIR should assess the comparative impacts of these alternative to those of the proposed project, and refine them further to reduce any significant impacts, as is the purpose of alternatives. Additionally, these should all be considered feasible absent independently reviewed financial information showing otherwise (per Sierra Club v. CC County decision). If the City parcel cannot be used for development, then the EIR should revise these alternatives to relocate the development and open space accordingly. The Cooperative looks forward to working with staff and the applicant to refine these alternatives.

119 cont.

- **Alternatives A1, A2, A3** would reduce the number of dwelling units, mass, height and parking by approximately thirty percent compared with the proposed project. These alternatives would substantially reduce trip generation/traffic impacts, noise, shading of adjacent residential resident properties and air pollution. An extension of the existing 45th Street is shown extending into the project and intersects with Hubbard Street. This extension aligns the existing street grid and assumes a reduction in traffic, turning motions and air pollution. Pedestrian and bicyclist Colonnades are shown on the ground floor of the existing building where it is intersected by 45th Street and at the North and South ends of the building. The "sectioning" of this building and the use of the existing building columns as part of the colonnade will illuminate historical construction methods and materials of the existing building. The additional pedestrian and bicycle access points will encourage non-vehicle access into the project and correspond to reductions in vehicle traffic, noise and pollution. The parking structure is relocated to the western edge of the proposed development adjacent to the railroad tracks and is lined with residential units on three sides. This relocation will minimize parking associated noises within the project and on adjacent residential properties. The relocated structure also should shield residences from noise from the railroad operation. Noise impacts from the freeway maze to the west and

adjacent parking structures located on the Ikea and Bay Street parcels also will be reduced by the sound barrier created by the relocated parking structure.

- **Alternative A2 is identical to A1** except that 45th Street is not extended into the project.
- **Alternative A3 is identical to A2** except that residential/retail buildings A1 and A2 are not bisected by the proposed extension of 45th Street.

119 cont.

Please feel free to contact us if you have any questions regarding these comments. The 45th Street Artists' Cooperative looks forward to working with the City to assure that the public and decision-makers are provided with a comprehensive environmental impact report.

Sincerely

Richard Grassetti
Principal
Grassetti Environmental Consulting

Joseph Light
Light Planning

Attachments:
January 20 Study Session Letter
45th Street Artists Cooperative Development Alternatives Plans

Letter
B2
Attach. 3

GECO
Grassetti Environmental Consulting

City Council
City of Emeryville
1333 Park Ave.
Emeryville, CA 94608

January 20, 2015

SUBJECT: 45TH STREET ARTISTS' COOPERATIVE COMMENTS ON SHERWIN WILLIAMS PROJECT DESIGN AND GENERAL PLAN COMPLIANCE

Honorable Council Members

Grassetti Environmental Consulting (GECo) and Light Planning have been retained by the 45th Street Artists' Cooperative (Cooperative) to assist in their review of the proposed Sherwin Williams Planned Unit Development (PUD) project. On behalf of the Cooperative, we are submitting these comments on the project's design issues and compliance with the City's plans and policies for the Council's consideration in the January 20 study session.

In summary, the proposed Sherwin Williams PUD is an excessively large and dense project. The residents of the 45th Street Artists' Cooperative are requesting that it be scaled downward and that its layout and a number of its components be reoriented, to reduce its impacts on the surrounding neighborhood, as well for its own inherent functionality and for conformance with City of Emeryville Plans, Policies and Development goals. We also further note that the schematic submittals are of insufficient detail and of too small of a presentation scale for decision makers to make informed decisions regarding the development proposal. The Council should ask for a more fully studied plan (as was suggested by several Planning Commissioners) before rendering opinion on the study concepts.

120

Further on that note, even though tonight's hearing is just a study-session based on very partial information and no entitlements or guarantees will be issued, study concept plans which face limited and only partially considered scrutiny can become cemented in form, and become "the Project" for CEQA review, thereby possibly precluding better and more desired approaches. Therefore, it is important that Council members have the time and information to carefully study this project.

<u>Scale, Layout and Density</u>: It should be emphasized that this is a very large project. At 100 dwelling units/net acre it will be the densest project in the City, and far larger and more intense then existing habitations in its immediate Park Avenue District surroundings. As proposed, it would place 540 new dwelling units with close to 1,000 parking stalls, generating thousands of daily motor vehicle trips funneled through a truncated, and arguably conflict prone, internal circulation system and thence to already congested local roadways. With buildings ranging from seven to ten stories and a seven story parking garage directly on Horton Street, it is not perfectly clear how this project adheres to the Park Avenue District vision of "fine grain and small block pattern..." Even with the

7008 Bristol Drive, Berkeley, CA 94705 (510) 849-2354 www.grassettienvironmental.com

extension of Hubbard Street through the site, it is arguable that the project as proposed has more the character of a super block then an urban-grain development participating in the general system of local streets (though impacting upon them).

The apparent organizing feature of the project is an extension of Hubbard Street as a central, north/south, oval linear park, modeled after 0.85 acre South Park in San Francisco, with interlinked connections to forthcoming city parks and open spaces. While the concept of a formal and sheltered interior plaza is compelling, the comparison with South Park breaks down under closer analysis. South Park's setting and character is that of a secluded enclave detached from the surrounding heavily trafficked general roadway system in a city of relatively low household vehicular usage. It is engirded by 58 two- to three-story residences lining an oval street which experiences quite low volumes of traffic. By contrast, the proposed oval park, Hubbard/46th Street extension, which will provide 0.58 or 0.56 or 0.30 acres (depending on the Report) of open space, will serve ten times the number of dwelling units with hundreds of dedicated parking stalls. As a result, rather than serving as a relief from the grid of traffic streets as does South Park, the proposed oval road and 46th Street dog-leg will tend to function more as an extension of the general roadway system itself.

Moreover, South Park's east/west orientation and low rise street wall allows direct sunshine to fall onto the park throughout much of the day and year. Due to its north/south orientation and taller wall surround, the proposed oval (particularly under the currently more viable Option B) has a very high likelihood of being cast in shade. It also provides measurably less open space then does South Park. Its much higher wall ground relationship, could also result in a perceptively cramped and ill proportioned open space. These issues were noted by some Planning Commissioners, who requested shade studies prior to making a recommendation and a lowering of buildings and by the DCC which called for a wider park presumably to serve as a functional open-space as well as to reach for sunlight. **120 cont.**

In addition to the formal and functional questions of the extension of Hubbard Street as a linear open space, its functionality as a circulation system also presents potential conflicts and inefficiencies that should be further thought through. The original alignment of the Hubbard extension as is shown in the General Plan, is a straight street with a dog-leg at the north end of the property turning towards Horton along the edge of, and providing secondary access to, the adjoining Rifkin Parcel which is entitled with a large development of its own.

The revised street layout by contrast, presents a number of high-volume entry drives converging at or near the oval's point of intersection with 46th Street (particularly in Option B where Building C-2's traffic is funneled through Building C-1 via a street level driveway crossing the pedestrian linkage between the oval and recreation park and through a second story bridging structure – visually and functionally impacting interconnection between the oval open space and the rail-side park—rather than exiting directly onto Sherwin Avenue). In addition to the problematic potential of this convergence in and of itself (sufficient queueing distances as just one problematic potential as an example), the oval arrangement of the roadway entails a number of extra turnings, crossings and potentials for congestion and conflict, particularly at the convergence point, then would a longer straight street say, with more dispersed driveway connections and without a mid-block intersection with the dog-leg. Shifting the 46th Street debouchment onto Hubbard is also of particular concern to the residents of the 45th Street Artists' Cooperative, as its newly proposed location of intersection is close, but off-set from their facing parking lot exit, thereby posing possibly higher hazard cross-turning conflicts between the two. The relocation also deprives the

adjoining Rifkin parcel access to Hubbard as had apparently been planned.

Other observations on the circulation: the revised plan shows bike and pedestrian path (as designated for off-street Class 1 Bike Path on the General Plan) crossing directly in front of the C buildings driveway. As shown, the pathway changes from a paved driveway type directly onto the street in front of the garage. Drivers entering or exiting the garage are thereby deprived of visual cues of a bike crossing as a result of the change in paving, possible driveway like curbing and its convergence onto the roadway. A visually continuous bike lane separate from the street (Class I) would be safer.

Also, the proposed traffic diverter shown on Horton Street, though not under the control of the applicant, could cause drivers to circle within the project in order to access either north or south access increasing traffic and turn conflicts within it. It might also result in usage of the new Hubbard extension as a shortcut bypass by north/south drivers from outside the project, exacerbating circulation short-falls and impediments of the oval as designed.

Revised Plans and Countable Lot Acreage. In the concept plan presented to the Planning Commission in October, the oval was to be 550' long reaching to building D and providing stub access to the Rifkin parcel. As noted by staff in their report, the proposed project density of 540 units and SF of floor area (not including an unknown 100,000's of SF of garage) was above the allowances of the District even assuming maximum bonus points. In response, the applicant has revised the plans relabeling the northern oval park and roadway segment as driveway and bike-path/emergency vehicle route. They also replaced the connector to the adjoining parcel with dysfunctional grouped loading stalls for the entire project. The applicant has, through this relabeling of roadways, claimed to increase the net size of the parcel thereby increasing the allowable density and intensity of the project. This design would allow traffic on an open space area, rendering the open space useless for residents. We are requesting that the Council reject this slight of hand and send the application back for an appropriately reduced density design. **120 cont.**

Additionally, this change in the geometries (from oval to rectangle) and ground treatment of the northern half of the oval, also has the effect of obviating the initial concept rationale of formal oval plaza, and its truncated remnant undoes whatever urban design sense it may have once had.

Alternative Concept: For the purposes of improving the project's internal layout and reducing its conflicts with the surrounding community, we present the following suggestions regarding placement of the passive open space area as well as the street and building layout. We also are requesting that the Council substantially reduce the project's density.

First, The whole project needs to be scaled downward and redesigned. Building B-2, which is little more than a seven-story parking garage festooned with a veneer of units on two sides.

In addition its size and character problem, Building B-2, as placed, faces directly across Horton Street onto a raw industrial back-lot, fitted with an uninviting soils remediation incinerator. It also adjoins a barren industrial parking lot slated for intense development with high-rise towers. (Given their proximity, Building D's location may conflict with Zoning policies regarding tower spacing, and Building D's views, and light and air access may be blocked by the planned towers.) The veneer of units applied to the front of the building will do little to disguise and moderate its essential and overwhelming character as a seven-story parking garage as prominently seeable from the street and other properties. Rather, the parking garage massing will tend to render the draping units as visual incongruities.

Reducing the bulk of that building and pushing it off the street, behind a park, which could be made by relocating the interior open space, would allow residents of fronting units to look onto the more protected parklet rather than the raw industrial setting of the street frontage. Also, bringing a plaza to the street could provide a better and more functional 'activating' experience to the frontage then a would a continuous street wall, by providing a strategic break from linear massing, as is encouraged by the City's design guidelines and specifically cited in the Park Avenue District Plan, which calls for small grain developments and sidewalks punctured by landscaping and street furniture.

Second, as described above, the oval open space in the middle of the residential site is flawed design. It would perhaps be better to abandon the central oval concept, leave the Hubbard extension a straight boulevard with the 46th Street dog-leg remaining along the Rifkin Parcel (away from the 1420 45th Street residences driveway) as currently shown in the General Plan, and relocating the passive open space in the oval to the Horton Avenue frontage on the site periphery. Doing this would insure full morning sunlighting of the passive open space while narrowing Hubbard Avenue would facilitate the goal of pushing Building B-2 (which should also be pared down to a community scale and designed in a manner that is functionally residential in program and appearance), to the west behind the new plaza at the 46th/Hubbard exit.

Use Category: Although the project is categorized as mixed-use, consistent with the District's designation, it is in fact, essentially a residential project. Of over 641,000 SF of new construction (not counting several hundred-thousand more feet of uncounted and undisclosed floor area within the multiple parking garages) only 20,600 (3.2%) of that construction is designated as commercial. Moreover, much, if not most, of that footage, is apparently allotted to 'live-work' or 'residential amenities' uses, which are part and parcel of the residential project itself, and not commercial. **120 cont.**

Over 70% of the total 96,600 SF of commercial space identified for the project is comprised by the existing building on Parcel A on a designated lot of its own at the periphery of the project area. Since that building is simply an existing commercial one that is being reoccupied, and has little integral interface with the larger project, it should, for all functional purposes, be considered a stand-alone reuse of an existing commercial building (one that is very likely to be sold and separated from the larger essentially residential project), rather than new commercial space in a mixed-use development. The remainder 'token' commercial spaces proposed are not sufficient to consider the project a mixed use development appropriate to the zoning designation and District Plan.

If a functionally wholly residential project is acceptable to City at this location, requisite residential development standards as they pertain to setbacks, private open space, landscape and building separation design and zoning standards should be applied. At any event, all 'live-work' units that are provided should be designed to have a fully functional 'work' arrangement. (Many purported 'live-work' developments are more akin to a simple residential unit-style than functional art, work or craft spaces.)

Parcelization: Since the project is to be subdivided into individual parcels that may be separated and sold the project application should include a Tentative Map showing lot boundaries as is required as part of a PUD submittal (Section: 97.1005.E). The map should include all appropriate drainage, utility, cross access and maintenance agreements necessary to maintain comprehensive functionality of the project as a master development following potential parcel separation. The TM should also demonstrate how each individual

lot would comply with requisite setback, height, landscape and density and intensity standards, among others, of the General Plan, Zoning Ordinance and other governing regulations as stand alone developments after potential sale or conveyance and separation. Reciprocal arrangements for access to 'residential amenities' should also be demonstrated, and permanent parking allotments encoded for each individual parcel's usage. The Map should also indicate that sufficient sanitary sewer and treatment capacity and other public utilities exist to serve the site.

Completeness of Application: We are requesting that, in addition to the subdivision map mentioned above, the PUD application submittals include:

- *Full-sized scalable drawings, including floor plans and full building sections*
- *Graphic displays of site areas devoted to private and common open space allotments, and 10% site landscaping areas*
- *Visual simulations of building envelopes and massings in context with existing and proposed conditions*
- *Sun and shading studies*
- *Preliminary assessment of roof-top equipment and penthouses should also be included*
- *Floor area of parking garage and access drives should also be enumerated.*
- *Given the high total parking allowances and significant potential trip generation impacts of the project. It is also imperative that a Transportation Management Plan specifically geared to reducing and managing automobile trips to and from the site as well as guiding an appropriate site layout and circulation system design be prepared as part of the application rather then as an after consideration condition.*

Conclusion: The project design is flawed and requires reworking with respect to open space, circulation, and density. **120 cont.**

- *The density is excessive. The concept plan for the study session, which is 80 units higher than the Housing Element forecast, assumes maximum feasible build-out with maximum attainable bonus points. The Council should not permit this conceptual super-maximum or other less then optimal aspects of the project as described above. Only three other developments in Emeryville have densities of as much as 85 units/acre. At 100 units an acre the study concept would create the most densely inhabited project in City; instead, the applicant should be instructed to scale the project downward and re-conceptualize the design and layout based upon these and other relevant comments from others.*
- *The oval concept is flawed and has been compromised in concept by the latest redesign.*
- *The internal open space is no longer functional and now a roadway is being improperly considered open space to permit excessive density.*
- *The proposed circulation plan is flawed and needs to be re-worked.*
- *The project is essentially a residential project under the guise of a mixed-use project. The Council should provide clarity as to whether it desires a residential project on the site (which would be required to comply with residential standards), or a true mixed use project, with greater commercial space.*
- *The application is incomplete and the scale of plans submitted is unsuitable to appropriate analysis.*

In addition, because of these deficiencies, it is premature to start the CEQA process. As the court stated in County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 192-193, 139 Cal.Rptr. 396, "[o]nly through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its

environmental cost, consider mitigation measures, assess the advantage of terminating the proposal ... and weigh other alternatives in the balance. An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." Thus, "[t]he defined project and not some different project must be the EIR's bona fide subject." (Id. at p. 199, 139 Cal.Rptr. 396.)

120 cont.

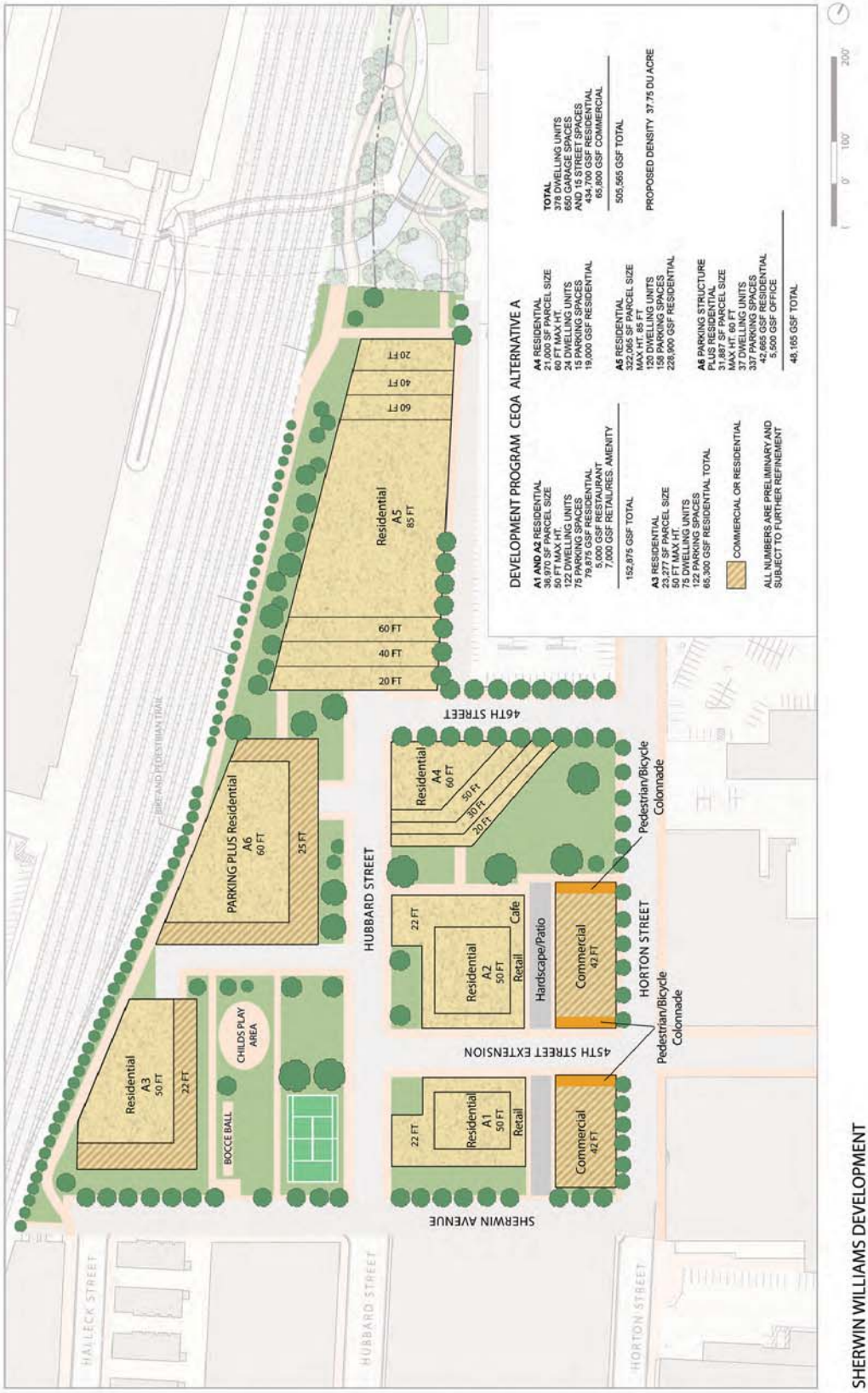
Please feel free to contact us if you have any questions regarding these comments. The 45th Street Artists' Cooperative looks forward to working with the City and project applicant to create a development plan that enhances the neighborhood for all of the neighboring residents.

Sincerely

Richard Grassetti
Principal
Grassetti Environmental Consulting

Joseph Light
Light Planning

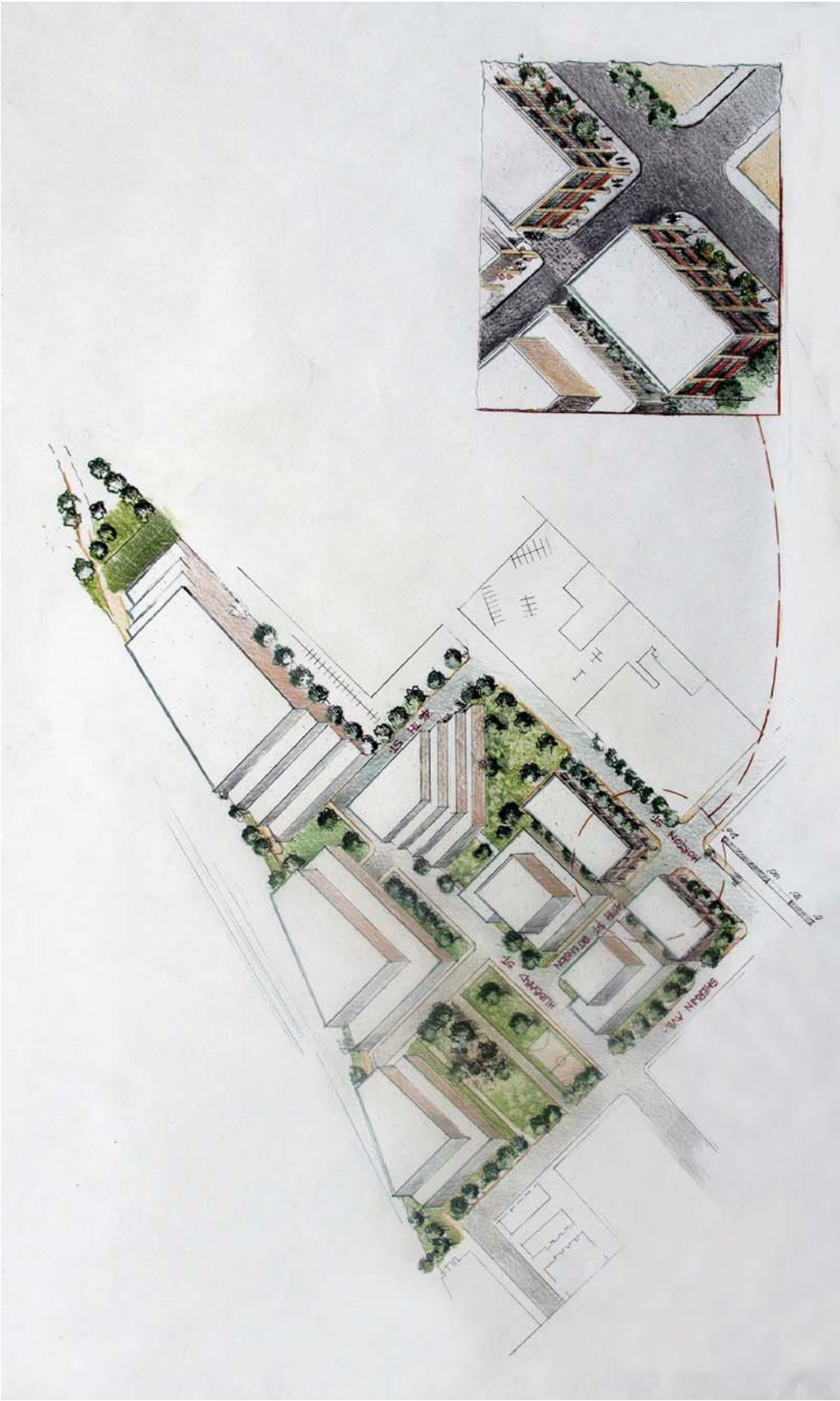
Letter B2
Attach. 3



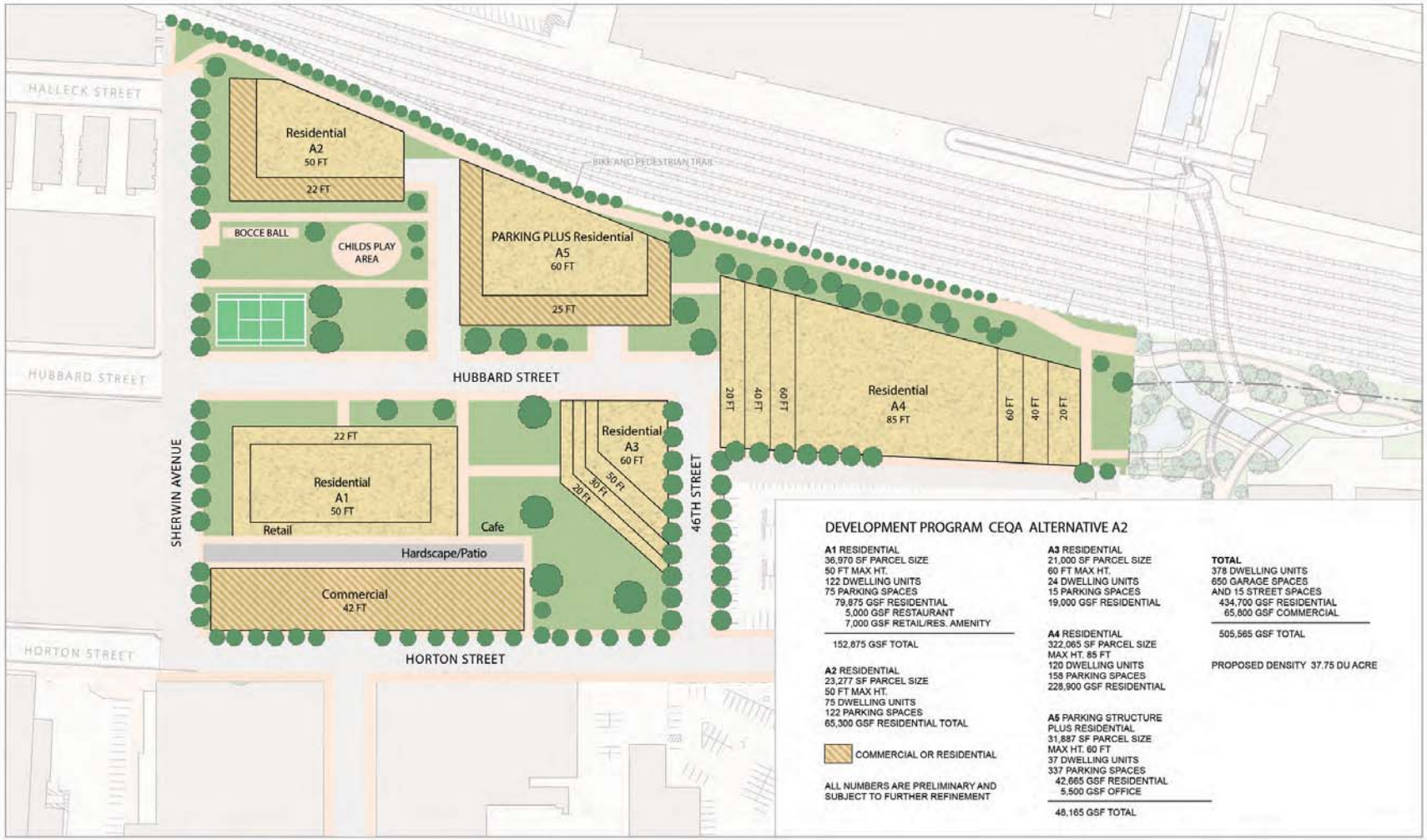
SHERWIN WILLIAMS DEVELOPMENT
CEQA ALTERNATIVE A
PREPARED BY THE 45TH STREET ARTISTS COOP

120 cont.

Letter
B2
Attach. 3



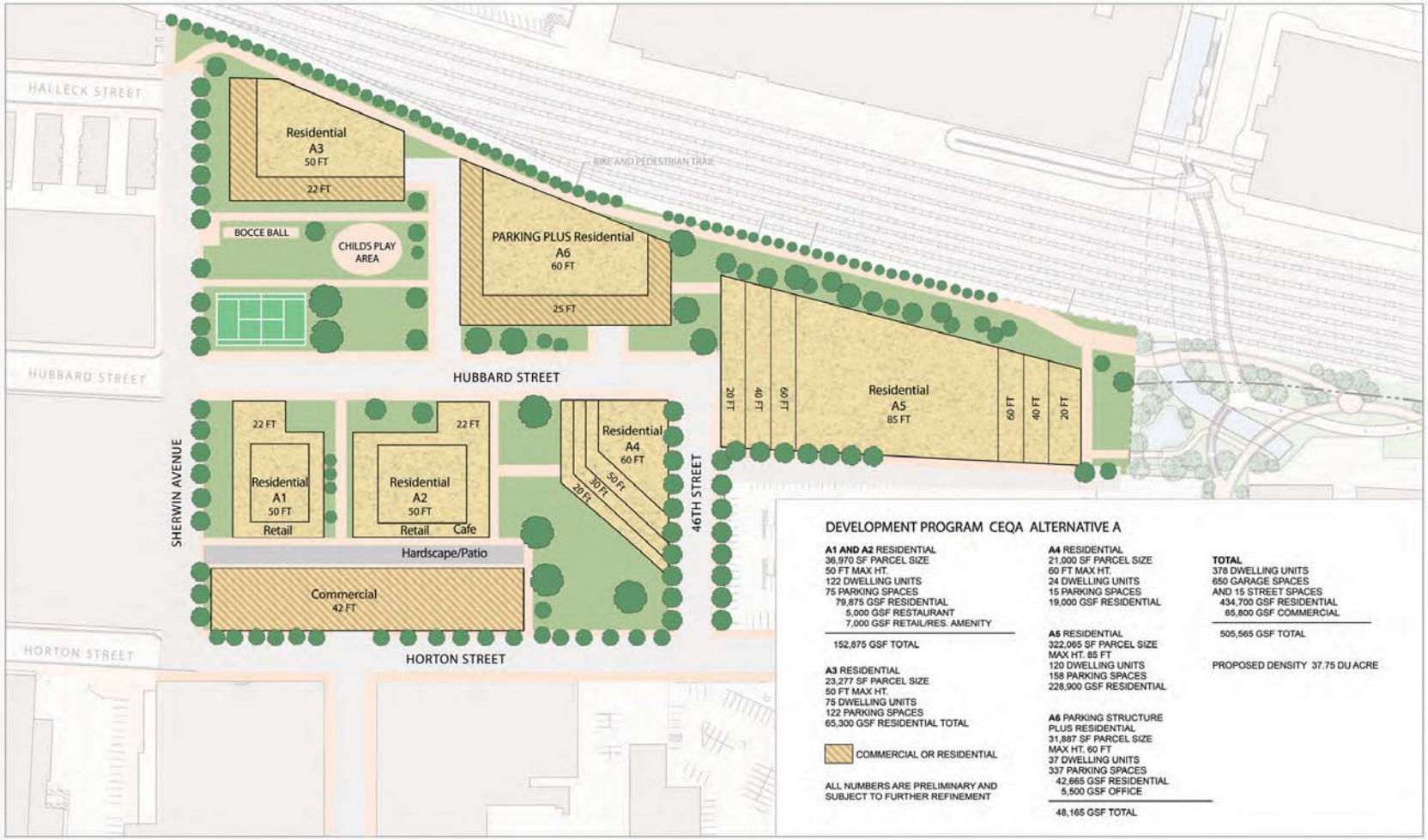
120
cont.



SHERWIN WILLIAMS DEVELOPMENT
CEQA ALTERNATIVE A
PREPARED BY THE 45TH STREET ARTISTS COOP

120 cont.

Letter B2
Attach. 3



SHERWIN WILLIAMS DEVELOPMENT
CEQA ALTERNATIVE A
PREPARED BY THE 45TH STREET ARTISTS COOP

120 cont.

Letter B2
Attach. 3

COMMENTER B2
45th Street Artists' Cooperative
Richard Grassetti
March 7, 2016

Response B2-1: This comment is introductory in nature. Please see Master Response 2 and Response B2-2 for a discussion of information required to be included in an EIR Project Description. Please see Master Response 2 and Responses B2-3 through B2-31 which discusses the policy concerns raised by the commenter.

The comment also includes the statement "… the Draft EIR also is deficient in addressing a large number of potentially significant impacts…" The commenter does not identify specific deficiencies in the Draft EIR, or provide additional information or analysis to which a specific response can be provided. However, the commenter does appear to believe that there is a "slavish use of the Initial Study (IS) checklist items as its criteria and thresholds of significance for most topics." Under CEQA, a significant effect is defined as a substantial, or potentially substantial, adverse change in the environment. The CEQA Guidelines direct that this determination be based on scientific and factual data. Each topical section of the Draft EIR included criteria of significance, which are the thresholds for determining whether an impact is significant. These criteria of significance have been developed in a cooperative process with the City and LSA staff using the CEQA Guidelines and applicable City policies and guidelines or the standards of other regulatory agencies. The reader should note that the Draft EIR included a discussion of effects found not to be significant in Chapter VII, Other CEQA Consideration.

Response B2-2: Please see Responses B2-3 through B2-31 which addresses compliance issues raised by the commenter. This comment includes a list of information that the commenter feels needs to be included in the project description. Regarding the CEQA Guidelines requirements for an adequate Project Description (per Section 15124) see Master Response 1.

Contrary to the commenter's assertion, the project description is not "unstable and incomplete" as it does include the information required by the CEQA Guidelines and is sufficient to allow for an analyses of the potential environmental impacts of the proposed project. It should be noted that the guidelines specifically state that project descriptions "…should not supply extensive detail beyond that needed for evaluation and review of the environmental impact."

Many of the items identified by the commenter are actually included in the Chapter III, Project Description. Development scenarios showing uses and square footage calculation are included in Table III-2, Figure III-4, Figure

III-5, Figure III-6, and Figure III-7. As discussed in Master Response 1, the City's PUD process does not require submission of information to the level of floor plans and interior wall design. Furthermore as noted above, the CEQA Guidelines also does not require the level of detail requested in the comment.

Response B2-3: The Sherwin Williams project will be conditioned to prepare a TDM Plan that will be reviewed and approved by the City. Preliminary TDM strategies were identified as part of the TIA, and the Project Applicant has also prepared a preliminary TDM plan (see Letter C15).

Response B2-4: Please see Master Response 2 regarding the Development Bonus.

Response B2-5: See Master Response 1 regarding the CEQA requirements for what needs to be included in a Project Description. As discussed, CEQA does not require the foundation type to be included in a project description, as noise, dust, and other environmental impacts from construction can be analyzed without reference to foundation type. Nevertheless, the applicant proposes to install drilled displacement columns (DDC) in combination with shallow spread footings. The DDC columns would be 24 inches in diameter and would range in depth from 25 feet to 30 feet and will generate minimal spoils. The overall foundation systems will not result in any additional exporting of soils

Response B2-6: The information requested by the commenter is included on pages 171 and 172 of the Draft EIR. This information has been summarized into a table, as requested by the commenter, and is shown below.

The following text revisions are made to page 63:

> The project is currently contemplated to be built in one phase with construction commencing in the third quarter of 2016 or as soon as all applicable permits are issued. The first units would be delivered in the second quarter of 2018. Table III-5 provides an approximate summary of the anticipated construction schedule.

Table III-5: Approximate Project Construction Schedule

Phase	Duration	Equipment Anticipated	Workers
Demolition	15 days	4 excavators; 2 loaders; 1 miscellaneous vehicle	10 workers/day
Grading	30 days	16 large machines; trucks associated within fill import	15 workers/day
Services Installation	40 days	4 pieces of heavy equipment	14 workers/day
Building	520 days	16 pieces of heavy equipment; trucks associated with materials delivery/ inspections/other activities	175 workers/day

Response B2-7: Please see Master Response 1 and Response B2-2 for a discussion of information required to be included in a Draft EIR Project Description. While the inclusion of a Tentative Map in not required under the CEQA Guidelines, much of the information requested by the commenter has been included in text, figures, and tables included in Chapter III, Project Description, within the Draft EIR. For example, proposed lot boundaries are shown in Figures III-4 and III-5; conceptual utility plans are shown in Figures III-14 and III-15; proposed pedestrian/vehicular/bicycle circulation is shown in Figures III-12 and III-13; proposed height is shown in Figures III-6 and III-7; and proposed landscaping is shown in Figures III-10 and III-11. Please see pages 33 through 64 of the Draft EIR for information regarding the proposed project description. Please see Section IV.L, Utilities and Infrastructure, for a discussion of public utility services to the project site.

Response B2-8: Please see Master Response 1 and Responses B2-2 and B2-7 for a discussion of information required within the Project Description of the Draft EIR. Please see Master Response 2 for a discussion of the Development Bonus and project feasibility. The CEQA review need not be "suspended" as the Draft EIR, with the minor corrections identified in this Response to Comments Document, provides an adequate level of information to allow the decision-makers to consider the proposed project, the potential significant environmental impacts and to make a determination regarding project approvals.

Response B2-9: As described in the Draft EIR, since the project site is over 5 acres, a Planned Unit Development (PUD) is required. A PUD is a rezoning, which must be adopted by the City Council by ordinance, following recommendation from the Planning Commission. The PUD would govern the zoning of the project site. The PUD allows for flexibility in designing modern, large-scale, mixed-use developments on sites with complex development constraints, such as environmental contamination. A PUD is established through the approval of a Preliminary Development Plan (PDP), which sets forth the type and intensity of uses on a site, as well as the basic development guidelines. After the PDP is approved by City Council, the individual building designs would be approved by the Planning Commission through one or more "Final Development Plans" (FDPs). All of the buildings in the project can be approved in a single FDP or they can be phased over time through multiple FDPs. Please also see Master Response 1.

Setbacks are discussed on page 453 of the Draft EIR. As noted on that page, the minimum setbacks of buildings from lot lines are prescribed in Table 9-4-301(a) of the City of Emeryville Zoning Ordinance. The MUR designation allows structures to be constructed on any property line, except when it abuts a residentially zoned district, either High Density Residential (RH), High to Medium Density Residential (RMH) or Medium Density Residential (RM). As shown in Figure V-5 of the Draft EIR (page 451), the project site is not bounded by any of these residential zones.

Open space requirements are discussed on pages 453-454 of the Draft EIR. Open space requirements for mixed-use projects are the sum of the requirements of individual uses as provided in Section 9-4.303 of the Zoning Ordinance. The requirements for multi-unit residential and live-work units are as follows:

- A minimum of sixty (60) square feet of required open space shall be provided per dwelling or Live/Work Unit, consisting of forty (40) square feet of private open space and twenty (20) square feet of common open space, except as stipulated below.
    - i. To the maximum extent feasible, each unit shall be provided with a private open space.
    - ii. Where infeasible to provide private open space, common open space may be substituted for private open space at the ratio of two to one (2:1) (i.e., eighty (80) square feet of common open space may substitute for forty (40) square feet of required private open space).
- Commercial and Institutional Uses.
    1. New buildings or additions that exceed ten thousand (10,000) square feet but are less than one hundred thousand (100,000) square feet shall provide a minimum area of common open space and/or privately owned public open space (POPOS) that totals at least five percent (5%) of the gross floor area.
    2. New buildings or additions that exceed one hundred thousand (100,000) square feet shall provide a minimum area of common open space and/or privately owned public open space (POPOS) that totals at least five percent (5%) of the gross floor area. Included in this requirement, the developer shall provide a minimum area of POPOS that totals at least one percent (1%) of the gross floor area.

Based on the open space requirements listed above, each unit would be required to provide 40 square feet of private open space and 20 square feet of public open space per unit. As there are 540 units, this would require 21,600 of private open space and 10,800 square feet of common open space associated with the residential component of the project. Additionally, the project includes 94,600 square feet of commercial square footage. The applicant would be required to include 5 percent of the gross floor area (4,730 square feet) as common open space. In total, the applicant would be required to provide 15,530 square feet of common open space and 21,600 square feet of private open space. As noted in Mater Response 1, a PUD/PDP submittal can set its own site standards including open space requirements. The project has not set its own standards for common and private open spaces and therefore the City's Planning Regulations Section 9-4.303 apply.

Section 9-4.504 of the Zoning Ordinance requires that 10 percent of the project site be landscaped. Conceptual Landscape Plans are shown in Figures III-10 and III-11 of the Draft EIR. The proposed project would provide approximately 23,100 square feet of landscaped area which is about 10 percent of the project area that will be developed with buildings and excludes publicly accessible open space area (2.08 acres), areas under streets (1.07 acres) and the City-owned open space parcel (1.46 acres).

Residential density is described on page 450-453 of the Draft EIR. The MUR zoning designation provides specific development standards for building intensity/floor area ratio, height and bulk, and residential density. Maximum residential density allowed on the MUR designation is 50 dwelling units per gross acre (base), which could be increased to 100 units per acre under a bonus program by the City, as is shown in Figure V-3. The maximum building heights for the project site are established on the General Plan Building Height Map, shown in Figure V-4. The maximum building height permitted for the majority of the project site is 40 feet (base) to 75 feet (with a bonus) with the exception of one parcel which permits building heights of 50 (base) to 100 feet (with a bonus). The proposed project's buildings heights are depicted in Figures III-6 and Figure III-7 in Chapter III, Project Description. The maximum intensity of buildings, expressed as a maximum floor area ratio (FAR), is shown on the General Plan Floor Area Ratio Map and illustrated in Figure V-2. Maximum building intensity or floor area ratio permitted in the MUR zone is 1.5 (base) and 3.0 (with a bonus), as shown in Figure V-3. As noted in the project description, the applicant's proposed project scenarios are based on the Development Bonus provision of the Emeryville Planning Regulations that allow for additional development intensity to be approved in exchange for provisions of affordable housing units and certain community benefits. Please see Master Response 2 for a discussion of the Development Bonus.

Response B2-10: As descripted in Table III-2 of the Draft EIR, the project includes a mix of uses including residential, retail, office and open space. The project is considered a mixed use project. Contrary to the commenter's assertion, Parcel A is considered part of the project site. It should be noted that the building on Parcel A is currently vacant and is not actively used commercial space.

As noted on page 63 of the Draft EIR, both potential development options will require a General Plan Amendment (GPA) to reconfigure the areas designated as Mixed Use with Residential and Park/Open Space, and the corresponding designations on the Residential Density map. For Option A, this reconfiguration would include the land swap of a portion of the Successor Agency parcel. For both options, this reconfiguration must result in no less open space than the current designations.

As the project site is over 5 acres, a Planned Unit Development (PUD) is required. A PUD is a rezoning, and must be approved by the City Council by ordinance, following a recommendation from the Planning Commission. The PUD would include a "Preliminary Development Plan" (PDP), which would govern the overall development of the site. After the PDP is approved by the City Council, the individual building designs would be approved by the Planning Commission through one or more "Final Development Plans" (FDPs). All of the buildings in the project can be approved in a single FDP, or they can be phased over time through multiple FDPs. The applicants have indicated that they intend to pursue a single FDP for the entire project following City Council approval of the PDP. This EIR evaluates the total project.

Response B2-11: Please see Response B2-10 regarding the project providing a mix of uses. Additionally, classification of the project as "mixed use" or "residential" does not affect the Draft EIR's evaluation of project impacts.

Response B2-12: Please see Master Response 2 regarding the Development Bonus and Master Response 1 regarding PUD/PDP submittal requirements. The Draft EIR has adequately evaluated the project's impacts pursuant to all CEQA requirements.

Response B2-13: Chapter V, Planning Policy, of the Draft EIR provides a discussion of the proposed project's consistency with land use policy documents. As noted on page 439 of the Draft EIR, policy conflicts are not in and of themselves considered significant environmental impacts under CEQA unless they would result in physical environmental impacts. The comment provides not identify specific instances where a potential policy conflict of the project would result in an environmental impact.

Response B2-14: Please see Response B2-13 regarding potential policy conflicts. Please see Response B2-2 for information required to be included in a Draft EIR project description. Please see Response B2-9 for a discussion of open space, setbacks, intensity and FARs. Please see Responses A1-4, B1-5, and B1-6 regarding parking.

Response B2-15: Please see Master Response 2 regarding the Development Bonus.

Response B2-16: Contrary to the commenter's assertion, a discussion of the Development Bonus, and the procedure for obtaining the bonus points, is included on page 51 of the Draft EIR. As noted there, "the height limits, number of residential units, and floor area described above [described within the Draft EIR Project Description] are based on the Development Bonus provisions of the Emeryville Planning Regulations that allow for additional development intensity to be approved in exchange for provision of affordable housing units and certain community benefits." Please see Master Response 2 for a discussion of the Development Bonus and the purpose of the Draft EIR.

Response B2-17: Please see Master Response 2 for a discussion of the Development Bonus.

Please see Responses B2-91 to B2-99 for a discussion of the alternatives analysis. As noted in those comments, the Draft EIR provides a reasonable range of feasible alternatives for consideration by the decision-makers.

Response B2-18: Please see Master Response 1 and Response B2-2 for a discussion of the information that is required to be included in a Draft EIR Project Description. Please see Master Response 2 for discussion of the Development Bonus.

The referenced text cited by the commenter on page 442 of the Draft EIR is within the discussion of the General Plan, not the discussion of the zoning ordinance or other regulations as stated by the commenter. The following text has been added to page 442 of the Draft EIR for clarification.

> General Plan policies applicable to the proposed project address: land use classification, intensity and height standards, city-wide and specific area land use policies, economic development and open space and pedestrian access. The proposed project, which would add up to 540 residential units to an existing underutilized, mixed-use/residential/commercial site, and is generally consistent with applicable policies in the General Plan, ~~as~~is described below. As previously noted, policy conflicts are not in and of themselves considered significant environmental impacts under CEQA unless they would result in physical environmental impacts.

This comment also includes the statement that regarding "potential nonconformities that are consistently understated" and then includes the statement that these are further addressed below within the commenter's letter, but does not include specific examples. Please see Responses B2-18 to B2-31 for responses to policies cited by the commenter. As noted on page 439 of the Draft EIR, policy conflicts are not in and of themselves considered significant environmental impacts under CEQA unless they would result in physical environmental impacts. The commenter provides no additional analysis showing environmental impacts not identified by the Draft EIR.

The comment also refers to Emeryville General Plan Goals LU-G-1. The text of this goal is presented below:

> Goal LU-G-1 An overall balance of uses—Employment, residential, cultural, destination and local retail—as well as a full range of amenities and services necessary to support a vibrant community.

As noted in Table V-2 of the Draft EIR (page 457), within the column titled "Project's Relationship to Goal, Policy, or Program", both proposed project options would include a mixed-use development project with a combination of residential and commercial uses (including retail), organized around a

central plaza, park/open space uses and the extension of the Emeryville Greenway.

The comment also refers to Emeryville General Plan Goal LU-G-2. The text of this goal is presented below:

> Goal LU-G-2 A mixed use city—Mixed-use development in various parts of the city, with the range of permitted and required uses varying to meet the needs of specific districts and neighborhoods.

As noted in Table V-2 of the Draft EIR (page 457), within the column titled "Project's Relationship to Goal, Policy, or Program", both proposed project options include a mixed-use development project that conforms to the Park Avenue District Plan's vision of live, work, and shop uses for the District.

The comment also refers to Emeryville General Plan Policy LU-P-1. The text of this policy is presented below:

> Policy LU-P-1 Land uses will be consistent with the Land Use Classifications in section 2.4 and the Land Use Diagram, Figure 2-2.

Section 2.4 of the Emeryville General Plan includes a Land Use Classifications section. Land Use Diagram, Figure 2-2, identifies the land use classifications on the project site as Mixed Use with Residential and Park/Open Space. The following are the descriptions of these land use categories included in the Emeryville General Plan:

Mixed Use with Residential is one or more of a variety of residential and nonresidential uses, including but not limited to offices, retail and hotels. On larger sites, a mix of residential and non-residential uses is required; on smaller sites, a single use may be permitted.

As discussed in the section titled "Land Use Classifications" on page 447 of the Draft EIR, permitted uses in the MUR land use category include both residential and non-residential uses, including but not limited to offices, retail and hotels. Both proposed project development options would include a mixed-use development with a range of residential (621,000 square feet) and commercial (94,600 square feet) uses. However, the configuration of the MUR and OP areas of the proposed project is not consistent with the General Plan Land Use Classification Diagram and would require a General Plan Amendment to reconfigure the areas designated as MUR and OP. For Option A, this reconfiguration would include the land swap of a portion of the Successor Agency parcel. For both options, this reconfiguration must result in no less open space than the current designation. Further, as noted in Table V-2 of the Draft EIR (page 457), within the column titled "Project's Relationship to Goal, Policy, or Program", the proposed project options are consistent with the Land Use Classifications – MUR and P/OS Land Use

Diagram of the City's General Plan. However, both proposed project development options would include a General Plan Amendment to reconfigure residential, commercial and open space land uses on the project site.

The comment also refers to Emeryville General Plan Policy LU-P-10. The text of this policy is presented below:

> Policy LU-P-10: Height and Intensity: Maximum building height will be defined by the Maximum Building Heights diagram, Figure 2-4 (of the General Plan).

Figure 2-4 of the General Plan has been in included as Figure V-4 of the Draft EIR. This figure, the Building Height Map, shows both the base height as well as heights available with a bonus. As noted on the map, bonus height is discretionary and will be awarded only after developers demonstrate that projects meets the City's Development Bonus requirements outlined in Section 9.4.204. As noted in the discussion titled "Intensity and Density" on page 447 of the Draft EIR, the maximum building height permitted for the majority of the project site is 40 feet (base) to 50 feet (with a bonus) with the exception of one parcel that permits building heights of 75 (base) to 100 feet (with a bonus). Assuming the project is in compliance with Section 9.4.204 and is granted Development Bonuses for heights, both the proposed project options would conform to the maximum building height allowed with the bonus as identified within the General Plan. The following text change is made to Table V, page 458, to provide clarification.

Table V-2: Applicable General Plan Goals, Policies, and Programs

Goal, Policy, or Program Number	Goal, Policy, or Program Text	Project's Relationship to Goal, Policy, or Program
Land Use Goals & Policies		
LU-P-10	*Height and Intensity:* Maximum building height will be defined by the Maximum Building Heights diagram, Figure 2-4 (of the General Plan).	Assuming the project is in compliance with Section 9.4.204 and is ~~would be~~ granted development bonuses ~~due to public benefits~~, both of the proposed project options would conform to the maximum building height ~~requirements~~ allowed with a bonus height as shown in Figure 2-4 of the General Plan.

The comment also refers to Emeryville General Plan Policy LU-P-11. The text of this policy is presented below:

> Policy LU-P-11 Maximum floor area ratios (FARs) and residential densities for sub-areas of the city, will be defined by Figure 2-3 and 2-6, respectively.

As described on page 447 of the Draft EIR, the General Plan intensity for the majority of the project site is 1.5 FAR, and 3.0 FAR with a discretionary bonus. The proposed project would result in an average 3.0. For residential development on the project, dwelling unit density should be between 50 units (base) and 100 units (with bonus) per acre, as established by General Plan policy LU-P-11. Intensity, height and density bonuses are based on a point system as well as review and approval process and are reflected in General Plan Policy LU-P-16. The proposed 540 residential units would average 100 units per acre, which is within the General Plan established density range for the project site.

The comment also refers to Emeryville General Plan Policy LU-P-12. The text of this policy is presented below:

> Policy LU-P-12 Bulk standards will be defined in the Zoning Ordinance, with particular emphasis on zones where taller buildings are permitted.

As described on page 458 of the Draft EIR, assuming the project is granted Development Bonuses due to public benefits, both of the proposed project development options would conform to bulk standards defined by the City's Zoning Ordinance. The Sherwin Williams site is a specific site that the General Plan and Park Avenue District Plan envisions with taller building heights (>88 feet) on the northeastern portion of the project site.
The comment also refers to Emeryville General Plan Policy LU-P-16. The text of this policy is presented below:

> Policy LU-P-16. A point-based system will be established for intensity, height and density bonus, as well as review and approval process.

Please also see Master Response 2 for further discussion of the Development Bonus.

Response B2-19: As shown in Figures III-6 and III-7 and Table III-2, both proposed project development options would include 10,000 square feet of retail use. No text edits are required.

Response B2-20: This comment refers to several design aspects of the proposed project, but does not address the analysis within the Draft EIR. The comment refers to Emeryville General Plan Goal UD-G-2. The text of this goal is presented below:

> Goal UD-G-2 A diversity of building types and scales – Variation to reinforce the identity of individual districts and foster a variety of options for living and working, with continuity in development scale and character and careful transitions between densities and design typologies.

The project site is located within the Park Avenue District. The following is the description of the urban design features of the Park Avenue District Plan, as included in the General Plan:

> "The Park Avenue District Plan establishes incentives and development guidelines toward the creation of a vibrant, mixed-use district. District-wide urban design policies seek to preserve architecturally significant buildings, maintain the existing small-lot pattern, and promote walkable and attractive places. More specifically the plan calls for sidewalks punctuated with landscaping and street furniture and unencroached by utilities; signage describing locations of historic structures, routes, and the Greenway; and visually distinct crosswalk treatment to give character to the district and ensure pedestrian safety. Along Park Avenue in particular, the Plan specifies wider sidewalks, corner bulbouts at key intersections, and bicycle racks on every block; it also encourages shared parking and allocated spaces for public parking."

Further, the Park Avenue District Plan included the following text regarding the project site and additions to the district:

> "In most of the district, the desired increase in intensity will occur as buildings redevelop to the existing height limits allowed with a conditional use permit (55 feet south of 45th Avenue and 80 feet north of that). Therefore these height limits should remain. However, North of Sherwin Avenue and west of Horton Street (the large Sherwin Williams site, which will likely be redeveloped soon) some taller and more intense development may be appropriate, particularly at the northern edge.
>
> "Additions and intensifications should be designed to complement existing buildings. The district's 73-foot Emeryville Warehouse Lofts, based on an older building with a penthouse added, is an example of development to this height that is generally accepted as appropriate. Buildings will be most successful if their scale is compatible with the rest of the district. This can be done through articulation of the façade with windows and doorways (the Design Guidelines in the Implementation section should be referenced) with particular attention to the building edge that runs along the street. The street edge of taller buildings can more appropriately fit into the

> district by setting back higher floors to effectively create smaller scaled buildings at the street level (see below).
>
> "The increasing development intensity is a potential threat to the district's architecturally significant buildings. It will be important to use the demolition approval ordinance to retain the Tier 1 and 2 buildings. Incentives should also be put in place to make restoration of these buildings more desirable. The City's façade improvement grants and toxics cleanup programs can be used to encourage adaptive reuse. Federal tax credits are also available for renovation of buildings deemed eligible for listing on the National Registrar of Historic Places. Zoning incentives such as parking credits should encourage rehabilitation of these buildings."

The proposed project would reinforce the identity of the Park Avenue District by retaining the existing Building 1-31 while also constructing new buildings to allow for mixed-uses at the project site. The project would include the extension of roadways into the interior of the project site to create smaller blocks within the site. The portions of the new buildings located along Horton Street and Sherwin Avenue would be stepped down to 55 feet and the project would also include the installation of sidewalks, lighting, crosswalks and landscaping to create a pedestrian-friendly environment. The project would also include the bicycle paths along the western boundary to connect to the Emeryville Greenway and Bay Trail and incorporate bike paths and bike parking. Parking would be provided within the project site. The opinion of the commenter that on the project site "all the buildings will be bulky and tall" is noted.

The comment also includes references to several park related goals. These goals are listed below.

> Goal UD-G-4 New Parks – Strategically located new parks and outdoor open spaces to enhance Emeryville's livability and pedestrian orientation.
>
> Goal PP-G-2 New Public Spaces – A public realm and new public parks and plazas that serve as focal points of the community.
>
> Goal PP-G-3 Integration of Parks and Open Space – Parks that are coordinated with surrounding developments to form unified urban compositions and that are integrated into the redevelopment of under- utilized areas.

This component of the comment provides the commenter's opinion that the park components would be better located within a different area of the project site. This comment relates to the design and merits of the project, not the analysis within the Draft EIR. No further response is required.

Response B2-21: The comment refers to Emeryville General Plan Goal UD-G-19. The text of this goal is presented below:

> Goal UD-G-19 High-quality—Design and construction that respects existing architecture, but creates new signature places.

Building 31-1 will be retained, thus respecting the existing architecture of the building. The goal cited by the commenter also includes a phrase to "create new signature places". The proposed project would result in new construction at a project site, that is currently vacant, and introduce new uses at the site, including publically accessible park and open space area, as well as commercial and retail uses. The commenter does not identify what type of analysis he is requesting to evaluate the "proposed construction's inherent merits or relationship to 'existing architecture'". Potential Visual Resources impacts are evaluated within Section IV.M, Visual Resources, within the Draft EIR. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines Section 15204).

Response B2-22: The comment refers to Emeryville General Plan Policy UD-P-35. The text of this policy is presented below:

> Policy UD-P-35 Tower separation shall be required to increase sky exposure for developments with multiple towers, and maintain separation standards for buildings taller than 100 feet.

The proposed project includes one building that is 100 feet tall and does not include multiple towers. This policy is applicable to buildings over 100 feet tall. This policy may be applicable to other projects cited in the comment, but is not applicable to the proposed project.

Response B2-23: The comment refers to Emeryville General Plan Policy UD-P-40. The text of this policy is presented below:

> Policy UD-P-40 Neighborhood structure and pedestrian scale development should be prioritized. The scale and character of existing neighborhoods should be maintained to ensure connectivity and continuity of street design within each district.

Please see Response B2-20 for a discussion about the urban design features noted within the Park Avenue District Plan and a brief summary of features incorporated into the proposed project, including the extension of roadways into the site to create smaller blocks. The visual character of the neighborhood is described on page 377 and 378 of the Draft EIR. The project

site is within the Park Avenue District (District) which is characterized by light industrial, historic brick buildings that have been adapted for residential, commercial, or office use. Most of the District's buildings are one to two stories in height; however, new construction in the area tends to be four- to eight-stories tall. The Emeryville Warehouse Lofts is the tallest building in the District at 73 feet and is located on the southwest corner of Sherwin Avenue/Hubbard Street intersection, across the street from project site. The project site is located in an urban area that is characterized by a mix of land uses and building types. The Union Pacific Railroad (UPRR) tracks lie directly west of the project site and multi-story retail and residential buildings within the Bay Street Mall are further west of those tracks. The Novartis Research Center and Grifols diagnostics (research and development facilities) are located to the north and east. The Novartis Research Center is a campus style development with modern-style buildings that range from two- to six- stories in height.

Response B2-24: Please see Responses B1-3 and B2-9 regarding park acreage.

Response B2-25: Please see Master Response 1 for a discussion of the required information to be included in a Project Description of the Draft EIR. Please see Response B2-9 for a discussion of public and private open space requirements.

Response B2-26: Please see Master Response 1 and Response B2-9 for a discussion of common and private open space requirements.

Response B2-27: It is believed that the commenter is referring to Emeryville Housing Programs H-2-1-1 and H-2-1-2. The text of these programs is presented below:

> Program H-2-1-1. Continue to offer a density bonus for developments that include affordable units, and consider offering additional regulatory incentives such as free or reduced-cost pre-application meetings, study sessions, and/or expedited application review and permit processing.
>
> Program H-2-1-2. Continue to implement the Affordable Housing Program (formerly known as the Affordable Housing Set-Aside Ordinance) to require the inclusion of below-market-rate units in residential projects.

The commenter notes information contained within the Draft EIR, specifically that the project does not include affordable housing (as noted in Table V-2 on page 469 of the Draft EIR). Please see Master Response 2 regarding the Development Bonus.

Response B2-28: The concern regarding the garage exit/entry in front of Building C-2 is noted. Specific design of the project access points have not been confirmed at this time, but will be reviewed by City staff for potential safety issues when provided by the applicant as part of the Final Development Plan review process.

Response B2-29: The comment refers to Emeryville General Plan Goal T-G-8. The text of this policy is presented below:

> Goal T-G-8 A balanced parking supply system— Parking supply that balances economic development, livable neighborhoods, environmental and energy sustainability, and public safety, while reducing dependence on the automobile.

Loading is evaluated on pages 183 and 184 of the Draft EIR. The commenter also raises the issue of "safeguards for permanent assignment of parking and loading spaces…" This issue relates to the project design, not the analysis within the Draft EIR.

The commenter also states "given the expected changes in unit types from the submitted project, it is unclear if the proposed amount of parking stalls will meet minimum required ratios." It is unclear what the commenter is referring to – there have been no changes to the unit types as described in Chapter III, Project Description of the Draft EIR. Should the project change from that which is currently proposed, additional CEQA analysis would be required.

Response B2-30: As stated previously and discussed in the TIA for the Draft EIR, The City of Emeryville does not have a level of service policy for vehicles, but strives to achieve a quality of service. For this assessment, level of service results are provided as a proxy for evaluating the transportation experience for vehicles, transit, and bicyclists and to guide the development of the transportation system in the project vicinity while balancing the variety of travel modes in the area. The City has determined that this is an adequate method and process for evaluating potential impacts of the project and disclosing them to decision-makers.

Response B2-31: As noted on page 442 of the Draft EIR, Table V-2 provides a policy-by-policy listing that indicates the proposed project's relationship and consistency with each identified applicable General Plan policy. Contrary to the commenter's assertion, the Draft EIR notes instances where the proposed project is not consistent with specific applicable policies. It should also be reiterated that policy conflicts are not in and of themselves considered significant environmental impacts under CEQA unless they would result in physical environmental impacts. While the commenter identified several specific General Plan and Housing Element goals, policies and programs, no additional evidence or analysis was provided indicating an additional

environmental impact would result from a potential policy conflict. Please see Responses B2-18 through B2-31 which provides responses to each goal, policy and program concern raised by the commenter.

Response B2-32: This comment serves as an introductory comment regarding cumulative analysis within the Draft EIR, but provides no specific questions or comments regarding the analysis within the Draft EIR. Please see Responses B2-33 through B2-38 for responses to cumulative impact analysis comments.

Although projects included in the cumulative analysis were included on page 107 of the Draft EIR, the following text revisions are made to page 67 of the Draft EIR for clarification:

E. CUMULATIVE ANALYSIS CONTEXT

CEQA defines cumulative as "two or more individual effects which, when considered together, are considerable, or which can compound to increase other environmental impacts." Section 15130 of the CEQA Guidelines requires that an EIR evaluate potential environmental impacts when the project's incremental effect is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. These impacts can result from a combination of the proposed project together with other projects causing related impacts.

When evaluating cumulative impacts, CEQA allows the use of either a list of past, present, or reasonable anticipated relevant projects, including projects outside the control of the lead agency, or a summary of the projections in an adopted planning document, such as a General Plan, or some thoughtful combination of the two. Depending the environmental topic, either a list of reasonably anticipated projects and or the projections of the General Plan were used to evaluate the potential cumulative impact.

For the cumulative traffic analysis, a Near-Term Conditions are defined as conditions around the time the project is expected to be completed and occupied. The Near-Term Conditions projects included in the analysis is based on the City of Emeryville Community Development Department Status of Major Development Projects dated April 2015. The projects included in the Near-Term Cumulative conditions include:

- Marketplace: 549 units.
- Hyatt Hotel: 171 rooms.

- 6701 Shellmound: Redevelopment of former industrial site for approximately 211 rental housing units.
- 3900 Adeline: Construction of a 101-unit rental apartment project on a 1.12 acre site that is partially in Oakland.
- 3706 San Pablo: Redevelopment of former Golden Gate Lock & Key site for City-sponsored affordable housing project with approximately 87 units and 6,130 square feet of commercial space.
- 3800 San Pablo: Renovation of former "Maz" building for 17,158 square feet of retail use, and 1,048 square feet of live-work; and construction of a new 75 foot, 5-story, 105- unit residential structure on the east portion of the lot over two levels of parking. Eastern 25 percent of lot is in Oakland.
- Emeryville Station West: Mixed use transit-oriented development and public parking structure with about 250,000 square feet of office/lab/retail space, 4 Amtrak bus bays, and 148 parking spaces in a 165-foot tall tower on the "Mound" site; and a 675-space, 7 level parking garage with 3,620 square feet of ground floor commercial space on the Heritage Square site. Project includes new public plaza between Amtrak Station and new tower building.
- Parc on Powell: Construction of a new rental project with 168 residential units, 5 live-work units, 3 flex space units, 10,222 square feet of retail space, and 299 parking spaces. Project includes new park along Stanford Avenue to replace City parking lot.
- Pixar Warehouse: Storage space for Pixar archives and reference material in 28,637 square feet of vacant portion of Level (3) building.
- Emeryville Center of Community Life: Multi-purpose community facility including administration; arts, performance, and food service programs; community services and family support programs; education programs; and recreation and fitness programs.

Due to the uncertainty of the level and expected time of completion for the Novartis development, adjacent to the project site, a longer-term Cumulative Conditions assessment was also conducted for the traffic analysis that included Novartis. The traffic model outputs were used to assess the potential cumulative air quality, global climate change, and noise impacts.

Response B2-33: The specific projects considered in the near-term and cumulative intersection and roadway segment analysis are identified on Page 107 of the DIER. The majority of the projects listed in Comment B2-33 were explicitly included in

the forecasts. Several of the listed projects were not included in the analysis as those projects involve a change in use where the City has not taken action, or occupation of a vacant building where the characteristics or timing of future occupation is unknown, such as the Restoration Hardware building located on 40th Street at Horton Street.

The inclusion of vehicle trips from the reoccupation of vacant or underutilized buildings would not change the overall conclusions presented in the TIA and Draft EIR. For example, the 40th Street at Horton Street intersection is projected to operate at LOS E in the cumulative condition prior to the addition of Sherwin-Williams project traffic. Including increased vehicle trip generation through the intersection from the reoccupation of the Restoration Hardware building would slightly increase delay at the 40th Street at Horton Street intersection from, but would not change the finding of deficiency identified in the Draft EIR or the overall conclusions. No changes to the Draft EIR analysis are recommended.

Response B2-34: To clarify information presented in the Draft EIR and respond to this comment, text on page 74 of the Draft EIR has been revised as shown.

- **Novartis Campus.** The Novartis ~~This~~ project could include~~s~~ approximately 788,000 square feet of net-new laboratory/research and development space to the north of the project site. The Novartis ~~This~~ project was approved in ~~2005~~ 1995 however; the timing and/or feasibility of completion of construction have not yet been determined.

Response B2-35: The cumulative land use impact discussion is located on page 77 of the Draft EIR. As described in this section, the proposed project would not result in significant land use impacts by physically dividing an established community, or conflicting with surrounding land uses, land use policies, or a conservation plan. With implementation of the requested General Plan Amendment, rezoning PUD/PDP, and building permits, the proposed project would be consistent with the applicable land use regulations for the site. Moreover, the proposed project reflects the development plan for the Sherwin-Williams site as stated in the City of Emeryville's General Plan and Park Avenue District Plan. The proposed project would not make a considerable contribution to a significant cumulative land use and planning impact. The comment does not identify any specific cumulative land use impact associated with the project, and does not provide any additional information or analysis regarding a cumulative impact.

Response B2-36: The cumulative population and housing impacts are described on page 83 of the Draft EIR. The following text changes are made to page 83 of the Draft EIR.

c. Cumulative Impacts. The proposed project would add a total of 540 new housing units to the existing housing stock in Emeryville and increase population by approximately 923 residents. The General Plan 2030 identifies the addition of 3,812 new housing units by 2030. Since 2008 (the baseline year for the General Plan), the City has issued permits for 809 housing units, approximately 21 percent of identified new housing units.[7] With permitted housing units considered, there are approximately 3,003 remaining housing units anticipated with buildout of the 2030 General Plan. Additionally, if the units included in the Cumulative Projects List are approved, this would result in a total of 390 units (already approved units on the Cumulative Project's list are already included in the issued permit total of 809 units). In total the approved units (809), potentially approved units (390), and units associated with the proposed project (540) would total 1,739 units. This represents approximately 46 percent of the units anticipated by the General Plan by 2030. The proposed project would represent approximately 18 percent of the anticipated units to be built by 2030.

Response B2-37: The commenter's opinion that the City erroneously used the City average per-unit population for the analysis is noted. Please also see Response B1-3.

Response B2-38: Cumulative utilities impacts are discussed on page 375 of the Draft EIR. Cumulative public service impacts are discussed on page 359 of the Draft EIR.

Response B2-39: Construction-related noise impacts are evaluated within the Impacts and Mitigation Measures subsection of Section IV.F, Noise, which starts on page 256 of the Draft EIR. Construction-related air quality and health-risk impacts are evaluated within the Impacts and Mitigation Measures subsection of Section IV.D, Air Quality, which starts on page 203 of the Draft EIR. Construction-related transportation impacts are evaluated within Section IV.C, Transportation and Circulation, starting on page 171 of the Draft EIR. While the commenter does not identify a specific type of health risk within the comment, construction related impacts are also described within Section IV.I, Hazards and Hazardous Materials, starting on page 313 of the Draft EIR.

Response B2-40: Details regarding the origin of construction materials, including equipment, are not known at this stage of the project development. The conditions of the rail spur on the north side of the project site were not evaluated as part of the Draft EIR and it is not known if that spur would be able to accommodate deliveries by rail to the site. Requiring that construction materials be delivered to the site by rail could limit the availability of construction materials and could unduly burden the project.

The potential for construction vehicles to block travel lanes was identified as a significant impact. Implementation of Mitigation Measure TRANS-9 would reduce this impact to a less-than-significant level.

Response B2-41: Construction dust impacts are discussed on pages 208 through 211 of the Draft EIR. Results of the analysis indicate that construction impacts to the surrounding residents, including the 45th Street Artists' Cooperative would be less than significant with implementation of Mitigation Measure AIR-1. Mitigation Measure AIR-1 would require the project applicant to implement the best available measures for controlling construction dust and other pollutants. According to the BAAQMD, implementation of these measures would reduce fugitive dust impacts to a less than significant level for all land use types, including live/work spaces and those land uses that use windows for ventilation. The measure would require watering of all exposed surfaces, limited vehicle speeds unpaved roads, suspension of excavation, grading and demolition activities during high wind events, and would require that vegetative ground cover be planted. With implementation of this measure, dust impacts would be reduced to a less than significant level as identified in the Draft EIR.

Response B2-42: Construction noise impacts to the 45th Street building are discussed on page 266 of the Draft EIR. The City noise ordinance is described on page 259 of the Draft EIR. The Ordinance defines daytime hours as the period from 7:00 a.m. to 9:00 p.m. on weekdays and from 8:00 to 9:00 p.m. The ordinance does not make assumptions as to whether occupants of receiving land uses would be home during the day or not or whether land uses would be residential or office spaces. Nighttime noise limits are typically more restrictive to protect relaxation and sleeping hours. Page 267 of the Draft EIR identifies Mitigation Measure NOI-3, which would require the project contractor to implement measures to reduce construction noise impacts to a less than significant level. The analysis concluded that impacts would be reduced to a less than significant level, and therefore retrofitting of the 45th Street building would not be required.

Response B2-43: The temporary vacancy of the Novartis/Grifols facility did not materially impact the conclusions presented in the EIR. Roadways in the immediate vicinity of the Novartis/Grifols facility that are designated bicycle boulevards either already operate beyond the desired volume thresholds, or are well within threshold range such that no additional bicycle boulevard impacts would be identified with a changed baseline. Although the City does not have an established level of service (LOS) policy for vehicles, the peak hour operations of intersections within the vicinity of the Novartis/Grifols facility operate well within the previously established LOS D range, such that changed traffic volumes for movements would not alter the conclusions presented in the EIR.

Although a changed baseline would not materially impact the conclusions presented in the EIR, the intersection counts collected for the project were compared to historical data. Intersection turning movement counts were collected for the project on Thursday, January 29 and Saturday January 31, 2015. Saturday traffic conditions would be largely unaffected by the temporary vacancy at the Novartis/Grifols facility.

The weekday PM peak hour counts, as presented on Figure IV.C-6 of the Draft EIR, were compared to counts contained in the City's traffic count database collected in December 2013 for the intersections of Hollis Street at 53rd Street, Hollis Street at Stanford Avenue, Hollis Street at 40th Street and Horton Street at 40th Street, where prior data was available. The Novartis facilities were not vacant during the counts taken in 2013.

On the southern end of the study area in December 2013, approximately 2,260 vehicles traveled through the Hollis Street at 40th Street intersection, as compared to 2,190 vehicles in 2015, a 3 percent increase; vehicle traffic on Hollis Street, north of 40th Street increased approximately 16 percent during the same time frame. In December 2013, approximately 2,040 vehicles traveled through the Horton Street at 40th Street intersection, as compared to 2,080 vehicles in 2015, a 2 percent increase; vehicle traffic on Horton Street, north of 40th Street increased approximately 17 percent during the same time frame.

Traffic volumes on the Horton Street and Hollis Street corridors increased by similar amounts between 2013 and 2015, approximately 15 percent. Although a portion of the Novartis/Grifols facility on Horton Street was vacant at the time of the data collection, the comparison of the traffic count data does not indicate that the baseline counts are artificially low, and it is likely that the employees that typically reported for work in the under renovation portions of the Novartis/Grifols facility reported for work elsewhere in the general vicinity. Based on the comparison of the 2013 and 2015 data and the existing operations of the study intersections and roadway segments, a different baseline would not change the overall conclusions presented in the TIA and Draft EIR.

Response B2-44: Please see B2-36 regarding cumulative population and housing impacts. Please see Master Response 2 regarding the Development Bonus.

Growth inducement is discussed on pages 499 of the Draft EIR. It should be noted that contrary to the commenter's inference, the Emeryville General Plan (Figure 2-6) allows a maximum residential density (with a Development Bonus) of up to 170 units/acre within certain areas of the City. The Draft EIR evaluates environmental impacts associated with implementation of the proposed project; the EIR does not evaluate "precedent" created by approval of a project. Each project proposed within the City undergoes CEQA review,

and the decision of the City whether to grant a Development Bonus is a separate review process not part of the CEQA evaluation.

Response B2-45: Contrary to the commenter's assertion, the Draft EIR identifies a residential population of 923 residents (540 units X 1.71 people [Emeryville average household size]) associated with the project.

It is unclear what the commenter means by the phrase "The EIR's reliance on "substantial unanticipated growth" as its significance criteria for growth inducement is unsupported." Please see Response B2-36, which includes a discussion of the population and housing growth anticipated by the Emeryville General Plan. Please see B2-44 for a discussion of growth inducement.

The Draft EIR does not use job/housing balance as a significance criteria. As noted in Emeryville General Plan, the ratio of jobs to employed residents shows whether a jurisdiction has a deficit or surplus of jobs relative to population. Evaluation of data from the U.S. Census and Association of Bay Area Governments (ABAG) shows that Emeryville had 4.2 jobs for every employed resident in 2005; this is the highest ratio of jobs to employed residents of any city in the Bay Area with the exception of Colma, which has a population of 1,500. The proposed project would provide 540 units and 329 jobs. It is expected that this project would assist in reducing the jobs/housing imbalance.

Response B2-46: The commenter's claim that the neighbors not opening their windows during construction of the project will result in the direct displacement of residents is highly speculative. As noted in Section 15145 of the CEQA Guidelines, if, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should not include its conclusion and should terminate discussion of the impact. Construction-related noise impacts are evaluated within the Impacts and Mitigation Measures subsection of Section IV.F, Noise, which starts on page 256 of the Draft EIR. Construction-related air quality and health-risk impacts are evaluated within the Impacts and Mitigation Measures subsection of Section IV.D, Air Quality, which starts on page 203 of the Draft EIR. Per CEQA requirements, the construction impacts discussion evaluates impacts up to the property line or building façade and useable outdoor space of effected sensitive receptors. As shown in the analyses, with the implementation of standard mitigation measures, construction-related impacts can be reduced to less-than-significant levels.

Response B2-47: Please see Response B1-4 regarding a level of service policy. The City of Emeryville does not have an adopted "Quality of Life Service Criteria." However, several criteria of significance related to all modes of travel were used, as detailed on pages 115 to 117 of the Draft EIR. As the City's General Plan Policy T-P-3 does not recognize "Level of Service" (LOS) as a measure of vehicular transportation operations, LOS impacts cannot be considered for significance and therefore require mitigation measures for such impacts.

However, the Draft EIR identifies LOS impacts for informational purposes only and outlines "recommendations" that would address these impacts.

Response B2-48: As described in the Draft EIR, the City does not have a level of service standard for vehicles. Intersection levels of service were evaluated to determine if there are recommended improvements to the transportation system that would enhance mobility for vehicle traffic, including transit vehicles, which would not result in secondary impacts to other modes of travel. For some intersections where level of service deficiencies were identified for vehicles, physical improvements were identified, such as intersection signalization. For other intersections, physical improvements were considered, but then rejected as they would have limited benefit for vehicle travel and would degrade bicycle or pedestrian travel. Transportation mitigation measures required of the project are summarized in Table II-1 starting on Page 10 of the Draft EIR.

Response B2-49: At the time the Draft EIR was prepared, no VMT standards of significance have been established. Please also see Comment 7 from the Alameda CTC (Letter A3) which notes Alameda CTC has not set thresholds for a VMT Assessment. Although a VMT threshold has not been established for application to this project, results of the VMT assessment indicate that the proposed project would generate VMT per capita at rates approximately 25 percent lower than the existing city-wide average VMT per capita based on the Alameda CTC model, exceeding the 15 percent reduction noted in the comment letter. No changes were made to the significance criteria.

Response B2-50: The 95th percentile vehicle queue threshold was developed based on proposed updates to the CEQA guidelines and is consistent with standards of significance used by other jurisdictions within Alameda County.

Response B2-51: Caltrans recognizes that in congested areas such as the study area, it may not be feasible or desirable to maintain a level of service policy as roadway improvements that might decrease delay for vehicles could result in secondary impacts to other travel modes. For example, adding additional vehicle lanes at an intersection would increase pedestrian crossing distances and thus pedestrian exposure to vehicle conflicts. Potential deficiencies for vehicles would need to be balanced against other travel modes. No changes were made to the significance criteria.

Response B2-52: Please see Responses B2-100 through B2-118 that address the specific comments raised in the PHA Transportation Consultants report.

Response B2-53: Preparation of a detailed TDM will be a condition of approval for the project. The project applicant has prepared a preliminary TDM plan (see Letter C15) that will be refined as the project description is further developed. A monitoring plan is incorporated into the TDM requirement such that additional measures can be required if specific goals have not been achieved.

Response B2-54: An evaluation of freeway mainline segments was conducted and presented in the TIA and Draft EIR. Project traffic would increase freeway traffic by less than 1 percent (and by less than 0.3 percent on the most congested segments), and the project specific freeway impact is less-than-significant. No further analysis was conducted.

Response B2-55: Please see Response B2-52. The MXD+ model validation included the Bay Street site, which achieved reductions up to 40 percent as compared to standard ITE rates.

Response B2-56: Based on observations of activity in the project vicinity, vehicle trips into and out of individual driveways on Horton Street and Sherwin Avenue are low and the addition of project traffic along the Horton Street and Sherwin Avenue could slightly increase delay for vehicles entering or exiting those driveways (1 to 2 seconds on average based on increases in delay at other side-street intersections along the Horton Street corridor), but would not impede access. As part of the data collection, truck traffic was documented and accounted for in the analysis of intersection operations. Bicycle and pedestrian conflict points were identified and mitigation measures were developed.

Response B2-57: Signal warrants were evaluated for unsignalized study intersections. Signalization is not warranted at the intersections of 46th Street and 45th Street with Horton Street. Signal warrants are satisfied at the Hollis Street at 45th Street intersection; signalization was identified as a mitigation measure.

Response B2-58: Please see Response B2-54 in regards to freeway evaluations. Numerous intersections that serve the City's retail areas and provided access to I-80 were included in the assessment, including:

1. Powell Street/Frontage Road
2. Powell Street/Eastbound I-80 Off-Ramp
3. Shellmound Way/Christie Avenue
4. Shellmound Street/Shellmound Way
5. Powell Street/Christie Avenue
6. Shellmound Street/Christie Avenue
7. Shellmound Street/Ohlone Way
8. Powell Street/Hollis Street

Response B2-59: The City’s Transportation Impact Fee program identified a number of transportation improvements that over the life of the plan will construct funds numerous transportation improvements in the City, including transit, pedestrian and bicycle improvements. Improvements will be programmed as part of the City’s Capital Improvement Plan (CIP) based on availability of funds from both the Fee program and other sources. Specific improvements

identified in the plan that are along the project boundary will be constructed as part of the project, including bicycle facilities on Sherwin Avenue and a Class I bicycle facility along the western project boundary.

For some mitigation measures, the wording allows City staff, Planning Commission Members and City Council members to develop a mitigation measure as part of the public hearing process.

Response B2-60: The City's goal in implementing its greenhouse gas reduction strategies contained in the Climate Action Plan (CAP) is to reduce greenhouse gas (GHG) emissions by 25 percent below 2004 levels. Table IV.E-7 of the Draft EIR outlines how the project would be consistent with the City's greenhouse gas reduction strategies and how the project would be considered consistent with the City's CAP. The City's CAP is not considered a qualified CAP per Section 15183.5 of the State CEQA Guidelines. Therefore, the CAP was not used as a tiering document for purposes of a significance determination. The criteria of significance are based on the Bay Area Air Quality Management District's (BAAQMD) thresholds of significance. The State Office of Planning and Research's proposed guidelines were released in 2008.[1] The current recommendations on the OPR website provide resource links to the BAAQMD CEQA Guidelines and their adopted thresholds, which were used in the Draft EIR analysis.[2] Therefore, the significance criteria used in the analysis was adequate for determining impacts, and additional analysis is not required.

Response B2-61: Cumulative air quality impacts are discussed on page 220 of the Draft EIR. As stated on page 220 of the Draft EIR, implementation of the project would not exceed operational thresholds for criteria pollutants and would therefore not result in a cumulatively significant criteria pollutant impact. Additionally, as shown in Table IV.D-8, the project would not exceed the BAAQMD's operational cumulative threshold for toxic air contaminants (TAC's). Based on guidance from the BAAQMD, the project would not have a significant cumulative effect and additional analysis is not required.

Response B2-62: The BAAQMD has determined that implementation of the construction practices identified in Mitigation Measure AIR-1 would reduce dust impacts for all land use types, including live/work spaces. The measures would control dust emissions such that impacts would not occur or affect the livability/work-ability of any interior space, including those of an artist.

[1] California Office of Planning and Research, 2008. *CEQA and Climate Change: Addressing Climate Change Through CEQA Review*. June.

[2] Website: www.opr.ca.gov/s_ceqaandclimatechange.php (accessed: April 20, 2016).

Response B2-63: The office space square footage was incorrectly listed as 74,000 square feet, however, the calculation to determine the service population was based on the correct number of 79,600; therefore, no changes to the analysis are necessary. A footnote was misplaced. Table IV.E-4 on page 241 of the Draft EIR is modified as follows:

Table IV.E-4: Annual Greenhouse Gas Emissions (Metric Tons/Service Population/Year)

Emissions Source	Project Square Footage/Units	Service Population (SP) Emissions	
		Service Population/ Square Foot [a]	Service Population
Retail	3,000	549	18
Restaurant	5,000	100	50
Office	~~74,000~~ 79,600	304	262
Residential	540	1.71~~b~~[b]	923
Total Service Population			1,253
Emissions per Service Population CO_2e (MT/Year/SP)			3.15

[a] U.S. Green Building Council. 2008. Building Area Per Employee By Business Type. February.
[b] City of Emeryville, 2010 City of Emeryville Census Bureau Data, Bay Area Census. 2010;

Source: ~~City of Emeryville, 2010 City of Emeryville Census Bureau Data, Bay Area Census. 2010;~~ LSA Associates, Inc., 2015.

Response B2-64: See Response B2-60 regarding greenhouse gas emissions.

Response B2-65: The sea level rise discussion provided on page 226 and 227 of the Draft EIR is provided for informational purposes only. As noted in the comment, Section IV.H, Hydrology and Water Quality provides additional background information on sea level rise as it pertains to the environmental evaluation of the project. No additional changes are required.

Response B2-66: See Response B2-65. Section IV.E, Greenhouse Gas Emissions, does not make an environmental impact significance determination related to sea level rise. Commenter should refer to section IV.H, Hydrology and Water Quality for project impacts related to sea level rise.

Response B2-67: The City has determined through development of its noise ordinance standards that the 55/65 dBA noise ordinance standard would be an adequate noise standard to achieve for operational noise. Table IV.F-2 of the Draft EIR indicates that 60 dBA is a typical noise level for normal speech. Additionally, existing noise measurements shown in Table IV.F-4 indicate that the noise ordinance standard would require noise levels to be lower than current noise sources in the project vicinity, such as traffic and rail noise, which were measured on the site to be up to 79 dBA L_{max} under existing conditions. Therefore, if noise levels generated by a source are determined to meet noise ordinance standards, the resulting project related noise would be

similar to or less than noise generated by existing conditions for residents at the 45th Street Artists' Cooperative with windows open.

Response B2-68: The commenter states that the projected noise levels of 89 dBA would make it impossible for occupants to work. The criteria for evaluating noise impacts associated with the project are listed on page 259 of the Draft EIR. The ordinance is designed to protect sleeping hours, however, the ordinance does not distinguish between residents or workers of live/work spaces or typical office buildings. Therefore, the noise ordinance is applicable to both land use types. As described on page 63 of the Draft EIR, project construction would occur for less than 48 months. It should be noted that the maximum noise level of 89 dBA would be limited to construction activities that would occur adjacent to the 45th Street building, such as construction of Parcel A. Construction noise levels would be much lower for the remainder of the construction period, and would be consistent with existing noise sources in the project vicinity when that construction would occur in other areas of the project site. For example, noise levels at the 45th Street Artists' Cooperative during construction of Parcel D would be a maximum of 68.6 dBA which would be lower than other existing maximum noise sources in the project vicinity such as traffic noise. Implementation of Mitigation Measure NOI-3 would reduce noise impacts by locating equipment staging areas away from noise-sensitive receptors and by placing equipment so that noise would be emitted away from noise-sensitive receptors. Mitigation Measure NOI-3 would designate a construction liaison to respond to any noise complaints generated during the construction period. Implementation of Mitigation Measure NOI-3 would reduce impacts to a less-than-significant level.

Response B2-69: Pile driving is not proposed as part of the project. Any pile driving would be subject to environmental review by the City. Please also see Response B2-5.

Response B2-70: The criteria of significance for determining project noise impacts (page 259 of the Draft EIR) are based on compliance with the City's noise ordinance. As stated on page 267 of the Draft EIR, the City of Emeryville does not have a maximum noise level standard for construction noise impacts. Implementation of Mitigation Measures NOI-3 would require compliance with the hours specified in the Municipal Code and would further limit the loudest activities to the hours of 8:00 a.m. to 5:00 p.m., resulting in a less than significant impact.

Response B2-71: Cumulative traffic noise modeling was conducted for the project. Model results are shown in Appendix D of the Draft EIR. Model results indicate the project would not result in a substantial increase in traffic noise in the project vicinity, in combination with other projects that would be developed in the City.

Response B2-72: Please see Master Response 1 and Response B2-2 for Project Description information requirements. Contrary to the commenter's assertion, construc-

tion-related impacts are evaluated within the Draft EIR. Information regarding net import of soil to the project site associated with both development Option A and Option B is included on page 63. With regards to dust, the Bay Area Air Quality Management District (BAAQMD) has established standard measures for reducing fugitive dust emissions, including the use of water or other soil stabilizers. Mitigation Measures AIR-1, identified on page 210-211 of the Draft EIR, would reduce construction related dust impacts to a less-than-significant impact. Toxic air contaminants were evaluated within the Draft EIR starting on page 213 of the Draft EIR. Construction-related traffic impacts were evaluated within the Draft EIR starting on page 171. Construction related noise impacts are evaluated within the Draft EIR starting on page 261 of the Draft EIR.

Response B2-73: The commenter indicates that the Draft EIR does not adequately address significant impacts related to liquefaction and subsidence, foundation designs, and indirect impacts related to excavation and off-haul of soil (e.g., traffic, noise, air quality, and greenhouse gases). The comment further states that deferral of completing the "site-specific geotechnical evaluation" is impermissible.

As described in the Draft EIR on page 275, regional hazard mapping indicates the project site has a relatively high liquefaction potential. This characterization was confirmed by the site-specific preliminary geotechnical investigation. Also described in the Draft EIR on page 275, subsidence and differential settlement could occur if buildings were built on low-strength foundation materials (including non-engineered fill). Any areas of the site that contain uncontrolled (non-engineered) fill may be susceptible to settlement.

Mitigation Measure GEO-1 requires as a specific criteria for project approval that "the nature and severity of the seismic hazards, including liquefaction potential, at the site have been fully evaluated in a site-specific geotechnical report and appropriate mitigation measures have been proposed." Further, Mitigation Measure GEO-1 requires that "prior to approving the project, the City shall independently conduct a review of the geotechnical reports to determine the adequacy of the hazard evaluation and proposed mitigation measures. Such reviews shall be conducted by a certified engineering geologist or registered civil engineer, having competence in the field of seismic hazard evaluation and mitigation." Therefore, implementation of Mitigation Measure GEO-1 would ensure that all geohazards (including liquefaction and subsidence) would be addressed and foundation designs would be appropriate and in accordance with standard geotechnical practice. Mitigation Measure GEO-2a through GEO-2c (starting on Draft EIR page 279) address foundation design and include requirements that the final geotechnical report address unstable and expansive soils with appropriate foundation designs which could include drilled pier and grade beams, deepened footings (extending below expansive soil), or post-tensioned slabs.

With regard to impacts related to excavation and transport of soil, potential impacts related to net import of fill (approximately 6,500 cubic yards for Option A and 7,800 cubic yards for Option B) was considered in the Draft EIR noise (page 266), air quality (page 209), greenhouse gas (page 239), and traffic analyses (page 172). No off-haul of contaminated soil is expected at this time; however, should substantial soil off-haul be required, and previously undiscovered contamination be identified, implementation of Mitigation Measure GEO-2 requiring a final site-specific geotechnical plan to identify off-haul amounts and Mitigation Measure HAZ-2 requiring further evaluation of soil gas conditions and approval of the SMP by DTSC would address this issue.

The reader should note that the Draft EIR evaluated the proposed development project, and other CEQA documents (as described in Chapter III, Project Description starting on page 33) evaluated the remediation activities. If previously undiscovered contamination is identified and would need to be disturbed on the Sherwin-Williams or Successor Agency parcels, DTSC and other regulatory agencies would determine the remediation to be undertaken and if additional CEQA review required. (City: please review and revise this statement as necessary.)

Response B2-74: The commenter states that a conceptual stormwater drainage and on-site treatment plan should be provided to demonstrate that the project would comply with NPDES C.3 requirements. A conceptual stormwater management plan was included in the Preliminary Development Plan Project Graphics (starting on page 34)[3] and described in the Draft EIR Project Descriptions (on page 52). Mitigation Measure HYD-1b requires full compliance with Provision C.3 of the Municipal Regional Permit (MRP), including the preparation and implementation of a design-level stormwater control plan (SCP). Provision C.3 has specific performance standards for stormwater treatment that, when implemented, are considered by the Regional Water Quality Control Board to reduce impacts to operation-period stormwater quality to a less-than-significant level. These performance standards include treating 100 percent of the amount of runoff for the regulated project's drainage area with LID treatment measures (i.e., harvesting and use, infiltration, evapotranspiration, and biotreatment) onsite or with LID treatment measures at a joint stormwater treatment facility. The performance standards included in the MRP and the City's in-place enforcement mechanisms are adequate to ensure that operation-period stormwater quality impacts would be reduced to a less-than-significant level.

Response B2-75: The commenter indicates that excavations, footings, and piles should be evaluated with respect to migration paths for contaminated groundwater. Please also see Response A4-2.

[3] ROMA Design Group, 2014. *Sherwin Williams Preliminary Development Plan Project Graphics*. December 15.

Response B2-76: The commenter states that potential impacts related to sea-level rise on the capacity of storm drain system should be considered and the Draft EIR should summarize and evaluate the proposed stormwater plans. As described in the Draft EIR (page 293), the project site is not considered at risk of flooding under the 2050 predicted sea level rise scenario. Also, the change in drainage pattern would not be expected to result in flooding on- or off-site because of proposed improvements to increase the capacity of existing storm drainage facilities in the immediate vicinity of the project site and incorporation of LID techniques designed to reduce runoff volumes through retention and infiltration. The project would result in a benefit related to net stormwater runoff and capacity of the drainage system relative to existing conditions. With regard to stormwater management plans, please refer to Response B2-74.

Response B2-77: The commenter requests a detailed evaluation of the required soil management plan (SMP), project compliance with prohibited activities, and non-interference with installed remediation measures, potential soil vapor and petroleum hydrocarbon emission hazards, and mitigations. The commenter notes that, as described in the Draft EIR, the monitoring wells on the property may not be downgradient of the former USTs of the Chromex property (page 307) and groundwater plumes from the ECI property (page 308). The commenter further states that no potential vapor intrusion analysis has been done as part of the Draft EIR, despite that potential impact (page 315). Regarding concerns associated with restrictions on the proposed foundation designs relative to remediation features, vapor intrusion impacts, the purpose of the LUC, the requirements of the SMP, refer to Master Response 3. On pages 307 and 308 of the Draft EIR, it is acknowledged that impacts to groundwater from the Chromex and ECI properties could potentially pose an environmental concern for the project site. These potential environmental concerns have been brought to DTSC's attention, as DTSC also reviewed the Draft EIR. The EIR is not required to include all of the information requested by the commenter at this time, and does not improperly defer mitigation as review requirements and performance standards (as discussed in Master Response 3) have been incorporated into the mitigation measures.

Response B2-78: The commenter indicates that the Draft EIR does not adequately address restrictions on the proposed foundation designs relative to remediation features, vapor intrusion impacts, the purpose of the LUC, the requirements of the SWPPP and SMP. Regarding concerns associated with restrictions on the proposed foundation designs relative to remediation features, vapor intrusion impacts, the purpose of the LUC, the requirements of the SMP, refer to Master Response 3.

As noted in Master Response 3, DTSC will perform their review of detailed construction plans and foundation designs when those designs are available which would be after the proposed project has been evaluated per this CEQA process. Therefore, mitigation has not been improperly deferred in the Draft EIR. See Master Response 1 regarding the level of information required in the project description. DTSC review of the detailed foundation designs and construction methods would include an evaluation of potential impacts and mitigations associated with altering the cap on the site's residual contaminated soils.

A detailed description of topics to be included in the SWPPP that would be prepared for the project site is presented on Page 290 of the Draft EIR under Mitigation Measure HYD-1a. As discussed on Page 290 of the Draft EIR, the SWPPP would be prepared by a Qualified SWPPP Developer in accordance with the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook-Construction, which, properly implemented, would ensure its effectiveness.

Response B2-79: The commenter states that the Hazards section of the Draft EIR has deferred and/or omitted analyses, and that the determination that impacts would be reduced to a less-than-significant level is not supported, and that these analyses should be conducted and significance of impacts reconsidered. Regarding concerns associated with the analyses performed, refer to Master Response 3. See also responses B2-73 through B2-78.

Response B2-80: The comment includes the statement "…the project will be required to include a greater number of "family friendly" units than the City's average." It is unclear what the commenter is referring to; there would be no requirements to provide a specified number of family-friendly units. Please see Response B1-3 for a discussion of the City of Emeryville average household size.

Response B2-81: As noted on page 358, Emery Unified School District does not have an adopted student generation rate. For the purpose of this analysis, the generation rate, or enrollment factor, that was used in the Emeryville General Plan EIR will be used to evaluate impacts to the school district. Using the Emeryville General Plan EIR's enrollment factor of 0.15 students per dwelling unit, the project could generate approximately 81 students in kindergarten through grade 12. It should be noted that the enrollment factor is applicable to the dwelling unit, and does not change based on the type of dwelling unit. The impact analyses relative to schools is provided starting on page 358 of the Draft EIR, as noted:

"Cumulative Impacts associated with school services, would be limited to within the EUSD boundaries. As expected residential and non-residential growth occurs within the EUSD boundaries, increased demand for schools is also expected to increase. However, with the construction of the ECCL, the

proposed project and other cumulative development within the City would not result in a potentially significant cumulative impact on schools. Development associated with the proposed project, or other development proposed within the school district, would be required to contribute school impact fees in conformance with State law and District requirements. School impact fees are deemed by statute to constitute full mitigation to reduce the impact of development projects on school facilities. Therefore, impacts of development on EUSD facilities, in combination with other past, present, and reasonably probable future projects, would not be cumulatively significant. This cumulative impact would be less than significant."

Response B2-82: Contrary to this comment, LSA did provide a description and site plan to the Fire Department for their review and comment. As noted on page 351 of the Draft EIR they provided a written response to LSA in regards to the project.

Response B2-83: Please see Response B1-3 regarding park acreage standards.

Response B2-84: A letter regarding water supply was provided by the East Bay Municipal Utility District (EBMUD) (the water provider for the City of Emeryville) has been posted on the City's website and is located at www.ci.emeryville.ca.us/DocumentCenter/View/8573. As noted in that response, the 2010 Urban Water Management Plan (UWMP) concluded that EBMUD has, and will have, adequate water supplies to serve existing and projected demand within the Ultimate Service Boundary during normal and wet years but that deficits are projected for drought years. EBMUD's Drought Management Program Guidelines establish the level of water use restrictions that EBMUD may consider based on the projected total system storage at the end of the water year. Up to a Stage 3 Drought, EMBUD-wide water use reduction goals of up to 15 percent may be required. In a Stage 4 Drought, EBMUD-wide mandatory water use reduction goals can exceed 15 percent. The Sherwin-Williams Development Project will be subject to the same drought restriction that applies to all EBMUD customers. Please also see Letter A2 from EBMUD.

Response B2-85: As noted on page 377 of the Draft EIR, the visual resources section evaluates the effects of the proposed project on visual resources and public views within and in the vicinity of the project site. Public views are defined as views from public locations, such as roadways, scenic vista areas, parks, schools or other public buildings. A view from within the 45th Street Artists' Cooperative buildings would be considered a private view. Additionally, it should be noted that the dominant feature of the view from 45th Street at Horton Street at the street level would be the existing Sherwin-Williams Building 1-31, which is a 42-foot high existing building.

Response B2-86: The commenter requests a discussion of "project compliance" with selected General Plan goals and policies. It should be noted that the Chapter V, Planning Policy, includes a discussion of the project's consistency with

various goals and policies, but does not address "compliance". As noted on page 439 of the Draft EIR, policy conflicts are not in and of themselves considered significant environmental impacts under CEQA unless they would result in physical environmental impacts. A discussion of the project's consistency with the goals and policies noted by the commenter is provided below.

The comment refers to several sunlight and shadow related goals and policies within the Emeryville General Plan. The text of these policies is presented below:

> Goal LU-G-8 Uninterrupted sunlight in key areas— during designated periods on all major parks. Adequate sunlight on sidewalks and streets, especially in Neighborhood Centers and other key public gathering areas.
>
> Goal UD-G-12 Uninterrupted sunlight—During designated periods on all major parks.
>
> Policy UD-P-39 New development should not cast significant shadow over existing development.

Shadow simulations were prepared for the both project development options and included in Section IV.M, Visual Resources (Figures IV.M-10 through Figure IV.M-27). As noted in that section, and shown in the shadow simulations there are no existing public parks, laws, gardens or open space within the vicinity of the project site that would be affected by shadows resulting from development of the proposed project. The proposed project does include a dedicated City Park, dog park, bike and pedestrian trail, children's playground, adult fitness, and sports courts. The proposed project would result in shade and shadows being cast on proposed open space amenities within the project site. As with the adjacent sides walks and streets, the shading of these public areas would vary throughout the year and anticipated shadows would not substantially affect the use of these spaces. The closest Neighborhood Center to the project site is on Park Avenue, south of the project. Shadows from the project site would not fall on Park Avenue.

The comment refers to Emeryville General Plan Policy UD-P-3. The text of this policy is presented below:

> Policy UD-P-3 Parks and open space shall be accessible and available to the public through site design standards for minimum size/dimensions, visibility, and location along public rights-of-way, particularly Green Streets (Figure 5-3 of the General Plan).

The proposed project includes approximately 2.08 acres of zoned open space on the Sherwin-Williams property and the approximately 1.46 acres of open

space on the Successor Agency property. Sherwin Avenue, which borders the southern border of the project site, is a Green Street. Under both Development Option A and Option B, open space would be accessible from Sherwin Avenue.

The comment refers to Emeryville General Plan Policy UD-P-13. The text of this policy is presented below:

> Policy UD-P-13 The Park Avenue District Plan will continue to guide development in the Park Avenue district, honoring its unique civic, arts, and cultural amenities.

Please see Response B2-20.

The comment refers to Emeryville General Plan Policy UD-P-33. The text of this policy is presented below:

> Policy UD-P-33 Bulky and monolithic buildings shall be prevented through:
>
> - Vertical articulation, such as step backs at higher floors, and less floor area as heights increase to reduce the apparent bulk of buildings.
> - Horizontal articulation, such as varied setbacks, recessions/projections, change in materials, and building transparency, especially in Pedestrian Priority Zones.

Please see Response B2-20 regarding compliance with City policies and plans.

> Policy UD-P-37 Development of a finer-grain scale and texture shall be promoted citywide and required in portions of the North Hollis, Park Avenue, and San Pablo Avenue districts, and around neighborhood centers.

Please see Responses B2-20 and B2-21 regarding compliance with City policies and plans.

Response B2-87: The City considers compliance with the City's Standard Conditions of Approval and requirements regarding the reduction of light and glare associated with new construction to provide sufficient mitigation to reduce potential impacts to a less-than-significant level. Additionally, the City will review the lighting plans as part of the review process as they are submitted, and no additional analysis is required.

Response B2-88: The significance criteria regarding shadows on parks and open space is as follows:

- Create new shadow in a manner that substantially affects outdoor recreation facility or other public areas.

Contrary to the commenter's assertion, shadow simulations were included in Section IV.M, Visual Resources. As noted on page 416 of the Draft EIR, the development of both building options would result in shade and shadows being cast on proposed open space amenities within the project site. The shading of these public areas would vary throughout the year and anticipated shadows would not substantially affect the use of these spaces. Furthermore, the amenities are associated with the proposed project and would be affected by shadows caused by the project. Because the proposed project would not result in a significant shadow impact which would substantially affect an existing or the future public outdoor recreation facility or other public areas, shadow impacts associated with the project are considered to be less than significant. Please see Response B2-86 for a discussion of the project's consistency with Goal LU-G-8.

Response B2-89: As noted on page 377 of the Draft EIR, the visual resources section is based on: 1) a field survey of the project site that was conducted by LSA in January 2015; 2) review of aerial photographs of the project site and vicinity; 3) data provided by the project applicant including conceptual site plans; 4) visual simulations that show "before and after" representations of the proposed project prepared by Environmental Vision; and 4) shade/shadow simulations of proposed buildings prepared by Environmental Vision.

Contrary to the suggestion of the commenter, a change in the visual conditions at a project site does not automatically result in a significant visual resources impact. Rather, as required by CEQA, changes associated with the proposed project were measured against the significance criteria (Draft EIR page 393) to determine if the project would result in a visual resource impact. While the addition of structures to the project site will result in a change in visual character, the thresholds of significance utilized in the Draft EIR and set forth in Appendix G of CEQA Guidelines speak to substantial adverse effects on a scenic vista, substantial damages to scenic resources, and substantial degradation of existing visual character. In exercising its discretion, a lead agency must necessarily make a policy decision in distinguishing between substantial and insubstantial adverse environmental impacts based, in part, on the setting (CEQA Guidelines, Section 15064(b)). Where the agency determines that a project impact is less than significant, an EIR need only contain a brief statement addressing the reasons for that conclusion (CEQA Guidelines, Section 15128). As discussed in Section IV.M, Visual Resources, substantial evidence supports the conclusions of the Draft EIR that the proposed project would not cause a significant impact to visual resources.

As noted in the Draft EIR, a small portion of the East Bay Hills that can be seen would be slightly to severely obstructed by proposed development under Option A or Option B. (as shown by visual simulations included in the Draft EIR). However, because views of the East Bay Hills are already very limited from these viewpoints by existing development, and public views of the hills would continue to be readily available from streets and parks in the vicinity of project, this impact is considered less-than-significant.

Response B2-90: The potential for the project to create a significant impact relative to wind was considered in the Draft EIR starting on page 501. It was determined that because the project site would only contain one building of up to 100 feet; is not within an area where there are many other buildings over 100 feet that could exacerbate wind effects (e.g., downtown Oakland or San Francisco), and is not located directly on the Bay shore, the production of wind conditions on public and off-site project spaces would be a less-than-significant impact. No additional analysis is necessary.

Response B2-91: The commenter's opinion that the identified objective is "inappropriate" is noted.

CEQA Guidelines Section 15126.6 states that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most [emphasis added] of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Furthermore, as noted in CEQA Guidelines Section 15126.6(a) "An EIR need not consider every conceivable alternative to a project." The alternatives included in the Draft EIR meet these requirements.

Response B2-92: The comment refers to an objective included in the project description, and how each alternative relates to the objective. The full text of the objective is provided below:

> *Realize a market economic return on the property that reflects the costs of land, site preparation, environmental considerations, infrastructure, open space improvements and vertical development.*

The discussion of all three alternatives includes a statement that the market economic return of this alternative compared to the proposed project is not known. Additionally, as all three alternatives did not "achieve" this objective, this objective was not used to identify the environmentally superior alternative. The Draft EIR appropriately evaluated the alternatives against the objectives stated for the project. The number of project alternatives identified and considered in the Final EIR meets the test of "reasonable" analysis and provides the City Council with important information from which to make an informed decision. CEQA does not require the review of economic effects related to the project or alternatives, and that information did not need to be

included in the Draft EIR. When making their Findings on the EIR and the project, the City Council can consider other factors including economic, legal, social, technological, and other benefits that could be achieved from implementation of the project or one of the alternatives.

Response B2-93: Contrary to the commenter's assertion, alternatives are not required to "mitigate many of the project's significant impacts." CEQA Guidelines Section 15126.6 states that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Furthermore, as noted in CEQA Guidelines Section 15126.6(a) "An EIR need not consider every conceivable alternative to a project." The alternatives included in the Draft EIR meet these requirements.

The alternatives included in Chapter VI, Alternatives, meet the standards in CEQA Guidelines Section 15126.6, and provided a comparative analysis of how impacts associated with implementation of the alternatives would compare to the proposed project.

The commenter provides no additional information or analysis regarding significant impacts "…the Draft EIR fails to identify…". As such, no specific responses can be provided. Responses to the previous comments are provided in Responses B2-1 through B2-92.

Response B2-94: The principal characteristics of the Base Zoning Alternative are provided within the Draft EIR starting on page 476. Contrary to the commenter's assertion, sufficient detail is provided to allow for a comparative analysis of the project (provided on pages 477 through 480 of the Draft EIR). Contrary to the commenters assertion, visual resources, shadow, land use and construction impacts, are evaluated within the Chapter VI, Alternatives.

Response B2-95: The Lennar alternatives identified in the comment are included and compared to the project in Chapter VI, Alternatives, of the Draft EIR as Lennar Alternative Variant 1 and Variant 2, starting on page 489. As allowed by CEQA, alternatives need not be described and evaluated to the same degree as the proposed project, and the Draft EIR provides a sufficient level of information to allow decision-makers to make a decision regarding the project and the proposed alternatives. Additionally, Table VI-2 on page 474 shows the daily and peak vehicle trips for the proposed project and compares vehicle trips for each alternative to those for the project. The analysis of each alternative discusses impacts related to vehicle trips. General levels of noise and air quality impacts related to each alternative are identified in Chapter VI as well. The location of garages is a specific design detail that does not need to be indicated for the proposed project or the alternatives in order for the

City Council to make a decision about the project and the adequacy of the EIR.

Response B2-96: Per the information provided on page 497 and the previous analyses, the Reduced Density alternative Variants 2 and 3 would be considered the environmentally superior alternative as environmental impacts associated with the project would be reduced or avoided under this alternative. Additionally, this alternative meets the project objectives to a greater degree than the Base Zoning alternative. By providing only 270 units, the Base Zoning alternative is not consistent with City's objective to, "develop the site with a mix of residential and nonresidential uses, including at least 460 residential units. (Emeryville General Plan, Housing Element 2015-2023)." The Reduced Density alternative would provide 378 units.

Response B2-97: See Master Response 2 regarding the Development Bonus. There is no need for the Base Zoning alternative to be considered the project as it has not been proposed for review and analyses but as an alternative to the project.

Response B2-98: As stated above, alternatives need not be described and evaluated to the same degree as the proposed project, and the Draft EIR provides a sufficient level of information to allow decision-makers to make a decision regarding the project and the proposed alternatives. Feasible alternatives to the project are identified and all Draft EIR topic impacts (included noise, air quality, transportation, geology, public services, utilities, and visual resources) are analyzed in comparison to the project starting on page 476 of the Draft EIR.

Contrary to the commenter's statement that "the Draft EIR has no analyses of traffic or associated noise or air quality impacts of the project other than simple trip-generation discussion," full discussions of the projects potential impacts related to noise (see Section IV.F, Noise), air quality (see Section IV.D, Air Quality) and traffic (see Section IV.C. Transportation and Circulation).

Response B2-99: This comment is conclusory in nature and reiterates points made in comments B2-1 through B2-98. The EIR authors and City as Lead Agency do not agree with the statement that the Planning Director provided "erroneous information" at the February 25, 2016 Draft EIR hearing. CEQA Guidelines Section 15088.5 state that:

> *(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives*

the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (Mountain Lion Coalition v. Fish and Game Com. (1989) 214 Cal.App.3d 1043)

(*b*) *Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.*

In this case, (1) there has been no significant new information added to the EIR as a result of these responses to comments or changes to the project or alternatives, (2) there has not been a substantial increase in the severity of an environmental impact; (3) no new considerably different feasible alternatives or mitigation measures have been proposed or are now available; and (4) it is the commenters opinion that the Draft EIR is "fundamentally and basically inadequate and conclusory in nature." This general statement has been refuted in the specific responses to comments B2-1 through B2-99. The Draft EIR, with the minor corrections identified in this Response to Comments Document, provides an adequate level of information to allow the decision-makers to consider the significant impacts associated with the project and make a determination regarding project approvals, and the Draft EIR need not be recirculated. See also Response B2-2.

Therefore, the information provided by the Planning Directory regarding recirculation per CEQA Guidelines Section 15088.5 was correct.

Response B2-100: This comment is an attachment to the letter and reproduces a report from PHA Transportation Consultants and provides introductory comments. For responses to this report, see response B2-101 through B2-118.

Response B2-101: The project is not expected to add more than 5 vehicle trips per lane over the course of the peak hour to the intersection of San Pablo Avenue and Stanford Avenue. Given the low concentration of project trips at this intersection, no further analysis was conducted.

Response B2-102: Intersections are typically the constraint point in the transportation system and are a better representation of the transportation system than a roadway segment analysis. The roadway segment analysis conducted to comply with Alameda CTC's requirements concluded that the project would have a less-than-significant impact on key roadway segment operations in the project vicinity. While speed could be used as a travel metric, there are no standards of significance for either the City or responsible agencies that relate to travel speed.

The roadway segment analysis was conducted based on Alameda CTC requirements, which specifies the analysis of near-term and long-term roadway segment operations. Existing roadway segment analysis is not an Alameda CTC requirement. As intersection operations are a better indicator of the overall transportation system, existing intersection operations were evaluated.

Response B2-103: The capacities used in the evaluation are based on guidance provided within the Highway Capacity Manual and have been used for other studies in Alameda County. Increasing or decreasing capacities for any one roadway segment would not change the overall conclusions presented in the Draft EIR as the incremental change in volume-to-capacity ratios with the addition of project traffic is not significant based on the criteria presented in the Draft EIR. The comment suggests the use of higher per-lane capacities than were used in the analysis, which would dilute potential project impacts.

Response B2-104: Queuing analysis study intersections along the noted corridors is provided in the appendix of the TIA. Significant project related queueing impacts were identified in the cumulative condition at the intersection of San Pablo Avenue at 40th Street. Although mitigation measures were identified, the impact was identified as significant and unavoidable.

Response B2-105: The trip reductions used for the project were based on the use of a validated mixed-use trip generation model, as documented in the TIA and Draft EIR. The analysis assumed a 10 percent transit reduction for Saturdays, not the 20 percent noted in the comment. As documented in the Draft EIR, the trip generation is based on standard ITE rates with trip reductions applied to account for the mixed-use nature of the site, the surrounding area, and the level of transit service. No changes were made to the trip generation.

Response B2-106: Based on observations of activity in the project vicinity, vehicle trips into and out of individual driveways on Horton Street and Sherwin Avenue are low and the addition of project traffic along the Horton Street and Sherwin Avenue could slightly increase delay for vehicles entering or exiting those driveways, it would not impede access. As part of the data collection, truck traffic was documented and accounted for in the analysis of intersection operations.

Response B2-107: Please also see Response to Comment B2-43 regarding the time period when traffic counts were taken.

Response B2-108: The preliminary project site plan was developed based on City parking requirements at the time the initial plan was developed in January 2015. The project would be required to provide parking within the range required by the City Code at the time of project approvals. Based on the current City Code requirements, the parking required for the project is between 434 and 713 spaces. As the final site plan is developed, the actual parking supply would fall within the allowed range.

Response B2-109: Beach Street was considered for inclusion in the assessment. However, the project is expected to add less than 10 vehicle trips per lane during peak hours to this connection and further analysis was not warranted.

Response B2-110: The effectiveness of the proposed partial street closers on Horton Street to mitigate the impact to bicycle boulevards was evaluated as part of the EIR. As part of the evaluation, the amount of traffic that would potentially divert to other streets was estimated in addition to the amount of traffic that might change their travel routes. The potential for secondary impacts to occur was evaluated. As disclosed in the EIR, the diversions would increase vehicle delay at some intersections in the area and divert traffic to other travel routes, potentially creating circuitous travel patterns for some trips. Even with the implementation of the mitigation measures, a portion of the bicycle boulevard impact would remain significant and unavoidable in the cumulative condition.

The Hollis Street at 45th Street intersection is currently unsignalized and in the near-term condition would experience poor operations for vehicles and peak hour traffic signal warrants would be satisfied. The addition of project traffic would exacerbate this condition. Based on the significance criteria outlined in the EIR, this is considered significant.

Response B2-111: The project would be conditioned as part of the project to install a traffic signal at the Hollis Street at 45th Street intersection. Should this project not move forward, other development projects in the City would pay their transportation impact fees that to fund the construction of the traffic signal.

Response B2-112: The City of Emeryville General Plan policies recognize that physical improvements to widen intersection to provide additional vehicle capacity may be counterproductive to achieving other General Plan goals and may be prohibitive for a variety of reasons, including limits on available right-of-way. The intersection analysis presented in the EIR was conducted to inform potential roadway improvements. Where an intersection is projected to operate at LOS E or F, the City evaluated the potential to provide physical improvements, which were identified at several locations. For other locations, potential physical improvements were weighted against other travel modes through the intersection, and in many cases the benefit to vehicles did not outweigh other considerations. To maintain operations at those intersections, city-wide strategies to provide existing and future users of Emeryville's roadway network would be needed, such as completing the City's bicycle network, enhancing transit opportunities, improving pedestrian connections, and providing a better balance of land uses within the City to encourage shorter trip lengths and a shift to non-auto travel modes for some trips. Although these strategies may not alleviate delay experienced by motorists, they would provide alternative travel choices.

Response B2-113: The commenter is correct that Parcel A would not have a dedicated garage. Parking for Parcel A would be provided in other portions of the project.

Any trip generation from existing activities on Parcel A is considered negligible and would have been captured in the traffic counts. No trip generation reductions for existing Parcel A activities were included in the trip generation estimates.

Response B2-114: Access to Parcel C1 under development Option B would occur through Parcel C2. The access was considered in the evaluation of Option B.

Response B2-115: The channelized right-turn lane at the Hollis Street at Powell Street intersection was reflected in the analysis.

Modifications to the Powell Street at Christie Avenue intersection were not in place at the time the data collection was conducted for the project. The near-term and cumulative conditions analysis was evaluated using the changed configuration and the results are presented below for informational purposes. This change does not alter the overall conclusions presented in the Draft EIR.

Table RTC-1: Intersection Level of Service

Intersection		Scenario	Peak Hour[2]	Without Project		With Option A		With Option B	
				Delay	LOS	Delay	LOS	Delay	LOS
5	Powell Street/ Christie Avenue	Near-Term	PM	39	D	43	D	41	D
			SAT	56	E	57	E	57	E
5	Powell Street/ Christie Avenue	Cumulative	PM	43	D	46	D	46	D
			SAT	56	E	56	E	56	E

Source: Fehr and Peers, 2016.

Response B2-116: The driveway for Parcel B-1 is located on Sherwin Avenue between Horton Street and Hubbard Street, and although the vehicle trips entering/exiting at this driveway were assigned to the roadway network, this driveway is not shown on the trip assignment figure. All project trips were assigned to the roadway network and accounted for in the intersection analysis. No changes were made to the analysis.

Response B2-117: A significant construction-related impact was identified and the mitigation measure includes requirements to develop truck routes for deliveries, provisions for pavement maintenance and removal of debris. Please see Mitigation Measure TRANS-9 for additional details.

Response B2-118 The comment is conclusory in nature and summarizes the previous comments. See Responses B2-100 through B2-117.

Response B2-119 This comment reproduces a letter from Grassetti Environmental Consulting commenting on the Notice of Preparation for the Draft EIR dated February 17, 2015. This letter is reproduced in Appendix A to the Draft EIR.

Response B2-120: This comment reproduces a letter from Grassetti Environmental Consulting to the City Council dated January 20, 2015, providing comments on the project design and General Plan compliance.

Letter
B3

Miroo Desai. AICP
Senior Planner
City of Emeryville
1333 Park Avenue
Emeryville, CA
March 8th, 2016

PARC

Park Avenue Residents Committee:

Sherwin Williams DEIR Comments

Comments on overall DEIR:

Because of several things that have happened since the DEIR began, the document does not present an analysis of likely scenarios. Major changes since the DEIR was initiated include the new City planning regulations and the availability of the redevelopment parcel. Although the latter is explored in Option A of the Proposed Project, it is only analyzed there with the developer's original concept of a "central green" and all traffic entering on Hubbard. In their alternatives, Lennar has moved past the central green concept, but did not submit an alternative utilizing the redevelopment parcel. Such a revised plan (most similar, in fact, to the Reduced Density Alternative) should be analyzed. In addition, neither option A, option B, or the proposed alternatives have detailed traffic flow or garage locations. These need to be identified and a detailed analysis of the traffic impact on each of the specific streets adjoining the project should be produced. 1 2 3

Simultaneous to the development of the DEIR, the Bike/Ped Committee and City are developing traffic calming measures for the portion of Horton Street directly adjacent to this project. The effect of traffic flows into and from this project both on this calming program and as a result of this calming program have not been analyzed. This apparently simple omission of analysis of a relevant and ongoing General Plan mandated direction of the City is symptomatic of this DEIR. As revealed in comments below, the DEIR is deficient in addressing a large number of potentially significant environmental impacts by giving a cursory discussion/conclusion, or through delaying of actual impact analysis and mitigation development to nebulous future studies and permits. 4 5

Letter
B3
Cont.

Comments on Mitigation Measures

Transportation and Circulation:

Disagree with conclusion on page 6 that: "Impacts in the following areas would be significant without the implementation of mitigation measures, but would be reduced to less-than-significant level if the mitigations measures recommended in this report are implemented" due to the following omissions and incomplete analysis: 6

Environmental Impacts: Invalid assumption: Impacts were based on current conditions as sampled in January and June 2015. During that period, major construction occurring at Grifols and Novartis. The construction resulted in a vacancy in those buildings, the traffic was skewed lower than normal in that area, during that time period. 7

Environmental Impacts: Omission: There will be Significant Impact on the traffic on neighboring streets (Hubbard, Sherwin, Halleck, and Holden) both from the project itself and from the mitigation measures proposed. Mitigation measures for that impact must be identified. 8

Environmental Impacts: Omission: There will be a Significant Unavoidable Impact on parking on the neighboring streets. As stated on page 92, parking is already at capacity. Mitigation measures could include: 9

i. Required strong TDM plan, analyzed within the DEIR to ensure the number of cars is reduced.
ii. Follow up study one year after implementation of TDM to assess success of TDM and take appropriate measures.
iii. Reduction in project density
iv. Peer review of proposed TDM by consultant selected by City.
v. Specific remedies must be identified in advance if TDM does not achieve the projected results anticipated by the DEIR.

Environmental Impacts: Omission: Full traffic analysis of original options and alternatives cannot be accurately assessed without the details (including internal traffic circulation, delivery spaces, etc.) cited in the DEIR in Figure IV.C-18. 10

Information regarding current, near and cumulative projects is incomplete (i.e. Transit Center, Pelco, etc.) and needs to be updated. 11

These could change the assumed traffic flow under the various options and, therefore, prioritize one option/alternative over the others.

Mitigation Measure: General Concern: Mitigation measures address paying the City's Transportation Impact Fee. Paying into a fund is not sufficient. The remediations should specify the implementation of a Transportation Management Plan by the City (e.g. limiting street parking, meters, etc.) and a one year review of the effectiveness of the implementation in reducing the traffic. It is the direct neighbors of the project who 12

will be most affected by this massive project. The mitigation must be directly related to mitigating the effects on the very residents who are affected. **12 cont.**

Mitigation Measure TRANS-1 (and related TRANS mitigations): The mitigations do not consider the **secondary impacts** on neighboring streets (p. 10)

vi. For all scenarios, the traffic diverter is identified as solution to high traffic counts on Horton, but does not analyze where that diverted traffic will go and the impacts of that on Hubbard, Sherwin, Halleck and Holden. **13**

vii. Placement of diverters (40th/Horton vs Sherwin/Horton) should be studied. **14**

viii. **Question:** An increase of 2% is identified as "significant impact", on the bicycle boulevards; what is the definition of "significant impact" on the side streets (Hubbard, Sherwin, Halleck and Holden) and on what is that assumption made? **15**

Mitigation Measure TRANS-8: The caveat at the close of TRANS-8 applies to all the TRANS mitigation measures. To wit: "To reduce impact, there are transit, pedestrian, and bicycle improvements planned…..However, there is no assurance that the impact would be mitigated to a less-than-significant level. Therefore, this impact is considered significant and unavoidable". (See p. 14) **16**

Mitigation Measure TRANS-9: Object to "Identification of parking areas for construction employees, site visitors, and inspectors, *i*ncluding on-site locations and *along the project frontage on Sherwin Avenue and Horton Street"* (p. 15). Document acknowledges on page 92, that on street parking is at capacity. **All construction parking must be on the premises.** **17**

Mitigation Measures Omissions:

ix. Reduce project density

x. The developer must negotiate and supply an Emery-Go-Round stop within the project that connects to West Oakland BART.

xi. If a traffic signal is installed at Horton and 45th, a detailed study is needed to re-calculate the queuing and delays that result from this installation. **18**

xii. Specific remedies must be identified in advance if TDM does not achieve the projected results anticipated by the DEIR.

Noise

Mitigation Measure NOI-3: It should specify that there is no truck idling allowed at any time. There was a major problem during the toxic remediation with trucks arriving early and cueing on the streets, idling their engines. **19**

The DEIR fails to adequately analyze noise impacts on residential interiors for historic brick warehouse lofts on Sherwin or Horton street. Please include this analysis in the DEIR. **20**

Railroad Noise Omission: The EIR does not show sound studies for changes in railroad noise due to the presence of new buildings of significant size and height. The General Plan EIR, **21**

LU-P-26 states "*If new residential buildings are proposed adjacent to freeways and railroad tracks impacts of these corridors, including noise, vibration, and air pollution, should be considered during site planning. Noise, vibration, and air pollution shall be mitigated to the extent possible.* " Residents adjacent to the new development and Bay Street residents across the railroad tracks may be impacted adversely. **21 cont.**

Visual Resources

Environmental Impacts. Strongly disagree that there are "no impacts to visual resource"

xiii. Height of buildings is not consistent with City objective of "Maintain existing height limits in the District except at the northern edge of the Sherwin-Williams site, where taller buildings may be appropriate". (page 44) **22** The streetscape of the surrounding buildings maxes out at 45'. The description that 1500 Park is 75' is misleading since there is only a small "pop up" (150 feet from the sidewalks) that was intended to give a visual lift to the building, not add to its mass. **23** There are no buildings higher than 45 feet on any of the street frontages adjacent to the project and most are only one-story. **24**

xiv. The study does not address the views from Emeryville Warehouse Lofts or Blue Star Corner or the Artists Cooperative. While views from public places, such as the 40th St. bridge are noted, 23 units of EWL face north and four from Blue Star; all will be blocked from the view of the East Bay Hills with Project Option B. **25**

Comments on Services and Recreation:

The DEIR says the city's existing fire, police, open spaces and para-transit can absorb the increase of over 900 new residents (plus over 300 additional jobs). This Is not a reasonable assessment of a clear impact on services. Please include mitigation measures for this very real impact. **26**

Comments on Alternatives:

The Alternatives have not been sufficiently analyzed for the variations of their impacts on traffic flow in the immediate neighborhood. Traffic circulation on the immediately neighboring streets (Halleck, Horton, and Sherwin) will be significantly different under the various alternative. While no additional traffic calming may be required in any of the alternatives, the traffic impact will vary greatly and will affect those living and working in the vicinity. **27**

The Alternatives have not been sufficiently analyzed for the variations of their impacts on the visual resources of immediate neighbors. Differences in siting of the park **28**

space and of the various heights of the buildings directly on the streets would result in significant differences to views and visual character of the neighborhood. 28 cont.

Density in excess of the City's goal of 460 housing units is presented as a positive for the City, rather than as a clear negative that would increase traffic, noise and decrease the visual resources of the neighborhood. In this case, a larger number is a worse number (like traffic counts), not a better number. 29

Comments on Project Description:

The EIR is missing substantial information from the project description, even though that information was specifically identified and requested by comments on the NOP. Despite NOP comments requesting specific information that needed to be added to the project description, the DEIR project description (the basis for the EIR) continues to be incomplete. The DEIR clearly states that no affordable dwelling units will be provided on-site (p.469) and flatly states, "the proposed project would not include affordable housing", without which bonuses cannot be granted. The DEIR presents a project utilizing a 100% bonus credit while affordable housing is mandatory for any bonus points. It is impossible to fully assess the extent of the mismatch between the Project and the new City policies because of the erroneous project description. Also, keeping 30

the project description so generic/incomplete is a clever way NOT to address project impacts in detail or in a meaningful way. This project is described as a transit-oriented development, however, the project is not including an Emery-go-Round stop on site which is one of the few transit oriented programs that the city has developed. Please show basis for this project actually being transit oriented. This project is not transit oriented, when the only public transit is one AC transit bus stop two blocks away. At a minimum, there should be a mitigation requiring the applicant to negotiate and provide an Emery-go-Round bus stop on site. 31

Comments on Project Objectives:

The applicant's objective of "organized around a central plaza" is inappropriate and should be deleted---this objective's sole purpose appears to reject other alternative layouts, and it even conflicts with the applicant's own "Lennar Alternative."

While the applicant's objective of achieving a return on their investment is permissible, the DEIR conclusions on market return on investment for each alternative are entirely unsupported by any evidence or fact. Please supply evidence or facts to support these conclusions. 32

Comments on Traffic and Parking:

33

The traffic study did not analyze several critical street segments; there appear to be bugs in the methodologies used to determine scale of the impacts; and it fails to provide details for meaningful and effective mitigation. Some of the traffic mitigation measures included in the DEIR are so vague as to delay or not assure mitigation. For example, Mitigation Measures TRANS-1, TRANS-2, and TRANS-3 include payment of an impact fee, but do not explain how payment of that fee would reduce or eliminate the impacts that the measure is supposed to mitigate. That measure also requires the applicant to "work with the City…" to mitigate impacts. Working with the City does not describe or require any mitigation. There is no way to evaluate how or even if this measure would be effective or implemented. Please explain how these fees, if paid, would be utilized to mitigate the traffic impacts. **33 cont.**

The DIER does not adequately address impacts on Parking. Even with the high on-site-parking ratios noted in the tables, and optimistic assumptions about mode split for transit ridership, this project will generate additional parking demand that is not analyzed. **34**

The DEIR fails to analyze the complete circulation network by omitting Beach Street and any impacts south of 40th street. Please include the complete circulation network in the DEIR and re-analyze. **35**

The trip generation estimates – Table IV,C-7 are questionable. A MXD+ model was used (see page 118) which again assumes a transit oriented project. The analysis assumes a 40% reduction in vehicle trips, assuming people will walk, bike and take transit to and from the site. Please show how these assumptions are based. **36**

How will the City address traffic impacts if the traffic analysis is flawed or the assumption that this is a transit oriented site is proven false? This project represents 1.1% of the acreage in the City of Emeryville. Proposing to put nearly 10% of the City's population into this area, bounded by a bicycle boulevard to the east and a two-block long street to the south, is wildly over-reaching the potential for this neighborhood to assimilate the traffic and parking impacts of the project. **37**

Reducing the number of parking spaces in projects is a tactic that is useful to discourage owning cars. It can work in developments that are truly transit oriented. However Inadequate parking facilities in a project that is not transit oriented results in spillover parking into the surrounding neighborhood not to mention greater traffic volumes on Horton Street than planned. Please address these very real impacts. **38**

The impact of the proposed additional transit ridership upon the Emery-Go-Round is not addressed. Because the DEIR is advocating as much as a 40% reduction in car traffic because of this "transit-oriented development," please analyze the impacts on the Emery-go-Round and AC Transit. These impacts need to be analyzed and mitigated. **39**

There is no discussion regarding housing tenure. What is the breakdown of rental and for-sale housing? Will the proposed project provide only rental housing? If that is **40**

the case please state this in the project description. What is the breakdown of apartment size: how many studio, 1 bedroom, 2 bedroom and 3 bedroom units? What is the proposed rent range and what is the percentage of units below market rate? The DEIR fails to adequately address the population and housing impacts by not considering the higher occupancies resulting from the larger unit sizes and anticipated household sizes for family-friendly housing. Please include data that reflects the now-required family-friendly housing and show impacts and mitigation. **40 cont.** **41**

Where is the breakdown for parking? Option A identifies 982 parking spaces and Option B identifies 929 parking spaces. How many parking spaces are designated for residential use, for office use and for retail use? What are the estimated number of office and retail workers? **42**

Lack of Detailed TDM Plan:

The DEIR's failure to use the correct methodology has resulted in an understatement of the project's traffic impacts to the bicycle boulevards as well as other peripheral streets, even with the assumed 35% reduction from transit (in a non-transit oriented project?). Mitigating this impact requires a strong Transportation Demand Management (TDM) plan to make a major reduction in trip generation. That plan has neither been created, nor is it even outlined in the DEIR. The DEIR is silent on the plan with the exception of a single sentence in Table V-2 on p. 470 of the DEIR, which states: The proposed project would implement a TDM plan that includes bicycle parking, bicycle storage, and electric vehicle charging stations.", and Recommendation 12 on p. 184 which states that the TDM plan may potentially include time limits on parking, providing information to residents about bike and transit facilities, monitoring of parking demand, designating car share pods, and designating a transportation coordinator. That "recommended" minimal description is the sum total of the TDM plan. The TDM plan has been improperly deferred in this EIR and the TDM plan cannot be evaluated as part of this DEIR. **43**

Comments on Construction Traffic:

The description of the construction schedule is inadequate (page 63): "The project is currently contemplated to be built in one phase with construction commencing in the third quarter of 2016 or as soon as all applicable permits are issued. The first units would be delivered in the second quarter of 2018." Please provide a breakdown (preferably in a table format) that identifies the construction activity (e.g. demolition, grading, services installation, building); duration of construction activity, peak number of construction workers by construction activity. Identify when construction is anticipated to commence, for example Summer 2016; and when construction will be completed for example: Spring 2018. **44**

Again project impacts are based on the Project Description which is inadequate. It is essential that a detailed Project Description be presented in the EIR to ensure that a complete and comprehensive assessment of project traffic impacts are identified and evaluated. 45

Page 143: Horton Street Traffic: The DEIR states traffic volumes on Horton Street between south of Sherwin Avenue to north of 53rd Street would increase by more than 2 percent and Table IV.C-17 is referenced. In this table, the percent increase in daily traffic volumes for roadway segments A, B and C are 28 percent, 39 percent and 27 percent respectively. Please explain why the identified percent increase is so low; i.e. 2 percent. This conclusion is misleading. 46

Mitigation Measure TRANS-1a: (page 145) does not recommend monitoring the effectiveness of the installation of permanent Level 4 traffic calming measures and traffic restriction (diversion) measures on Horton Street to reduce daily volumes to a level below 3,000 vehicles per day. Without monitoring, it cannot be confirmed the recommended mitigation measure is effective. Please add: "Undertake annual monitoring of Horton Street to confirm the recommended measures maintain daily volumes at a level below 3,000 vehicles per day." Additionally, bullet three, line 4 requires editing – correct. 47

The streets providing direct access to the project site (Sherwin and Horton) are designated as local streets in the Emeryville General Plan. Both streets are two-way single lanes with parking on both sides of the street. Construction truck traffic will be significant over the two-year construction period. The DEIR does not adequately address construction traffic impacts stating only that construction traffic will be less than the project. Construction traffic is much more disruptive than what is anticipated with project operations – large vehicles on narrow streets, trucks delivering materials throughout the day and construction worker vehicles parking on local streets which are currently used by adjacent residents. The DEIR does not identify where construction workers will park and where trucks will queue. 48 We request the modification of Mitigation Measure TRANS-9 (page 173) as follows:

Project control measures associated with lane closures should include:

1) the scheduling of truck deliveries to the project site shall occur not earlier than 7 AM and not later than 4PM; 49

(a) General construction noise on private and public projects shall be limited to weekdays from 7:00 a.m. to 6:00 p.m. Pile driving and similarly loud activities shall be limited to weekdays from 8:00 a.m. to 5:00 p.m.

2) if lane closures are required on Sherwin Avenue and/or Horton Street, property owners shall be notified ten days in advance of the lane closures;
3) provide a City employee name, phone number and email address for neighbor complaints.
4) Construction hours shall be from 7 AM to 5 PM Monday through Friday.

If the project applicant requires weekend construction, the adjacent properties to the project site shall be notified 10 days in advance of the proposed weekend work. The proposed work shall be included in the public notice.
5) The construction staging plan submitted to the City shall identify all construction staging activities anticipated to occur on-site. If any construction staging activities will occur off-site, the construction staging plan shall identify the location of the off-site staging areas. **49 cont.**
6) Parking areas for construction workers, site visitors and inspectors shall be provided on the project site. If parking for the identified workers, visitors and inspectors cannot be accommodated on the project site, the project shall provide parking facilities at a designated location off-site and transport workers, visitors and inspectors to the project site.
7) The Project shall provide funds to repair streets degraded by construction vehicles. The City shall provide a cost estimate to the project applicant based on their estimate of degradation to nearby streets.

Comments on Compliance with Park Overlay District Guidelines:

One of the Park Avenue District Plan's goals is to "preserve the district's unique, historic, diverse, brick-industrial and funky physical character". The impacts to those resources are not demonstrated, and no mitigation measures are identified. Impacts to visual resources are inadequate in that they do not analyze the impact to visual and historic resources on Horton or Sherwin streets - streets that have tier 1 contributing historic structures. Please indicate how these impacts have been mitigated. **50** Other impacts to visual resources are inadequately addressed in that the project massing does not demonstrate the Park Avenue Overlay District Guidelines goal to "Improve district streets to provide a pedestrian friendly environment and a unified, distinct district", in fact, the project sets itself apart and does not contribute to a unified district. **51** The EIR repeatedly states that the project is of an appropriate scale to the Park Avenue Overlay District Guidelines. This is patently not true. It further states that the Emeryville Warehouse Lofts (EWL) is a 75-foot tall building (it does have three two-story penthouse units on the roof, invisible from the street.) On the streetscape, EWL is a **52**

3-story building, and it is already the tallest in this neighborhood of one- and two-story buildings. In effect, this project is attempting to bring Bay Street Mall massing, heights, and aesthetics to the Park Avenue District. This is unacceptable. Please show how this project complies with the Park Overlay District Guidelines. **52 cont.**

Conclusion:

The DEIR is inadequate because it omits material necessary to informed decision-making and public participation. More than that, the DEIR is fatally flawed beginning with its project description and continuing with the items outlined above. The project description should be revised to reflect a project that can be built within the mandated guidelines of the City and the EIR should be recirculated. **53**

PARC
Park Avenue Residents Committee
Co Chair: Donna Briskin, Emeryville Warehouse Lofts
Co-Chair: Paul Germain, 45th Street Artists Cooperative
Marianne Clark, Horton Street Lofts
Bryan Hord, Bluestar Corner
Kevin Kellogg, Horton Street Lofts
Mike McConnell, Emeryville Warehouse Lofts
Sharon Wilchar, 45th Street Artists Cooperative

COMMENTER B3

Park Avenue Residents Committee
March 8, 2016

Response B3-1: The Draft EIR evaluates the environmental impacts associated with implementation of the proposed project. A revised project, which would require revisions or additional CEQA analysis, has not been submitted. Please see Master Response 2 regarding the Development Bonus.

Response B3-2: CEQA Guidelines Section 15126.6 states that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain *most* of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Furthermore, as noted in CEQA Guidelines Section 15126.6(a) "An EIR need not consider every conceivable alternative to a project." The EIR does provide a reasonable range of alternatives and the one proposed by the commenter is very similar to both the Reduced Density Alternative and the Lennar Alternative Variants 1 and 2 both of which "utilize" the Successor Agency parcel.

Response B3-3: In regards to "traffic flow," project trip generation, distribution and assignments were made for the proposed project in Section IV.C, Transportation and Circulation of the Draft EIR starting on page 117, and the impacts on local streets and intersections are provided in this section as well. The location of garages is not a necessary detail for an analysis of project impacts per the significance criteria identified in the Draft EIR. Trip generation was also identified for the alternatives; however CEQA allows for a lesser degree of analyses for alternatives. The comparison of alternatives to the project is adequate to allow the City Council to make a decision on the project and alternatives.

Response B3-4: The Draft EIR acknowledges that the City is undertaking an experiment to evaluate the effectiveness of different Level 4 traffic calming devices along Horton Street between 45th and 53rd Streets and plans to install temporary measures for a period of at least one year. As these measures could be installed along the project frontage, Mitigation Measure TRANS-1 specifies that that project applicant work with the City so that the final project design does not preclude the installation of desired traffic calming measures and that the project applicant be require to pay for the installation of measures such that existing traffic volumes in combination with project volumes be below the volume threshold to reduce the impact to a less-than-significant level. The effects of the turn restrictions on Horton Street were evaluated without and with the Project, as presented in Appendix B of the Draft EIR.

Response B3-5: The commenter makes general statement regarding the adequacy of the Draft EIR, but does not identify specific deficiencies within the Draft EIR to which specific responses can be provided.

Response B3-6: This comment is introductory in nature and does not identify specific deficiencies within the Draft EIR to which specific responses can be provided.

Response B3-7: Please see Response B2-43 regarding the traffic analysis.

Response B3-8: Potential project impacts to traffic on neighboring streets, including Hubbard Street, Sherwin Avenue, and Halleck Street, were evaluated as part of the Draft EIR. Holden Street was not evaluated as it does not provide a direct connection to the project site and project traffic is not expected to travel on Holden Street. Secondary impacts of proposed mitigation measures were reviewed, and for some impacts, the impact was classified as significant and unavoidable as the mitigation measure would degrade other modes of travel. The secondary impacts of traffic diverters on Horton Street were also assessed, as presented in Appendix B of the Draft EIR.

Response B3-9: The project will provide the code-required level of off-street parking to support parking demand from the proposed project.

The project will be required to implement a TDM program that includes a mechanism to monitor and adjust the plan; specific measures including unbundling parking from rent costs for residential units, charging for parking within the parking structures for the commercial uses, implementing time restrictions for parking on public streets within the project site, provision of a car-share pod within the site, and transit subsidies for residents and employees. Please see Response C15 for the applicant's TDM plan.

Response B3-10: It is unclear what the commenter means by the term "original options." The Draft EIR evaluates the project described in Chapter III, Project Description.

With regard to the evaluation of alternatives, CEQA Guidelines Section 15126.6(d) notes that an EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be cause by the project as proposed, the significant effect of the alternatives shall be discussed, but in less detail than the significant effects of the project as proposed.

Internal traffic circulation was evaluated as part of the Draft EIR process, and recommendations were provided in Figure IV.C-18 in Section IV.C, Transportation and Circulation, of the Draft EIR. This level of detail was not developed for the proposed project alternatives, as some were developed at a very conceptual level. The primary differences between the proposed project

and the project alternatives are discussed in Chapter VI, Alternatives, of the Draft EIR.

Response B3-11: Please see Response B2-33 regarding traffic analysis.

Response B3-12: The City's Transportation Impact Fee funds an array of City-wide projects primarily focused on bicycle, pedestrian and transit infrastructure. These improvements, as implemented, are intended to close gaps in the pedestrian and bicycle network, such as constructing a bicycle and pedestrian bridge connecting Bay Street to the study area. These improvements will complete improvements that are being constructed as part of the project, including construction of the Class I facility along the west side of the project site, and improvements to Sherwin Avenue consistent with improvements identified in the City's Pedestrian and Bicycle Plan.

Please see Responses A1-4, B1-5, and B1-6 regarding the TDM plan.

Response B3-13: Please see Response B3-4 regarding traffic diverters.

Response B3-14: The diversion analysis considered a number of locations along the Horton Street corridor for placement of diverters for both northbound and southbound travel. The placement of diverters on Horton at Sherwin was found to not be as effective in reducing traffic volumes on the segment of Horton Street at Sherwin Avenue as vehicles would continue to travel on Horton Street north of 40th Street, versus shifting to Hollis Street or other facilities.

Response B3-15: The effects of the diversion on Sherwin Avenue, and Halleck and Hubbard Streets were assessed through peak hour intersection analysis, which slightly improved the peak hour operation of some intersections and slightly increased delay for some movements at other intersections (1 to 2 second increase).

Response B3-16: The intersection of San Pablo Avenue at 40th Street is within Caltrans jurisdiction and the City has no control over the implementation of improvements at that intersection, including adjusting traffic signal timings. As the City does not have jurisdiction over this intersection, the impact was classified as significant and unavoidable.

Response B3-17: The Draft EIR acknowledged that construction workers may park on the street surrounding the project site. Mitigation Measure TRANS-9 requires the preparation of a construction management plan that identifies parking areas for site employees, visitors and inspectors.

Response B3-18: A reduced density project is evaluated as a project alternative.

The potential provide Emery-go-Round Service to the West Oakland BART station is beyond the control of this project and if that service is provided, the project has no control over the final routing plan.

Signalization of the 45th Street at Horton Street intersection is not proposed as part of the project, nor was it identified as a mitigation measure.

The TDM plan would be subject to monitoring with the potential to adjust measures. Please see Response B3-9 regarding a TDM plan.

Response B3-19: Truck idling would be limited through implementation of Mitigation Measure AIR-1 which would limit idling to two minutes which is stricter than the five minutes allowed under the California Airborne Toxics Control measure Title 13, Section 2485 of the California Code of Regulations. Some idling time must be allowed to allow for maneuvering on the project site and limited queuing. Under the measure signage will specify this idling limit. Any extended idling would be in violation of the Mitigation Monitoring Program for the project and would not be permitted.

Response B3-20: Page 266 of the Draft EIR indicates that construction of the project would generate noise levels at the nearest receptor of up to 89 dBA L_{max}. Exterior to interior noise reductions are described on page 261 and indicate interior noise levels with windows open would be reduced by approximately 15 dBA. Mitigation Measure NOI-3 would require compliance with the City's noise ordinance for permissible hours of construction, resulting in a less-than-significant noise impact.

Response B3-21: Noise impacts from railroad and other noise sources are discussed on page 260 of the Draft EIR are discussed for compliance with General Plan Policy LU-P-26. The analysis indicates that with standard building construction and windows closed, interior noise levels would meet the State interior noise standard. Mitigation Measures NOI-1 would require an alternative form of ventilation which would allow windows to remain closed. Construction of buildings on the site would act as a noise barrier from railroad noise sources. Resulting ambient noise levels at land uses east of the project site, including the 45th Street Artists' Cooperative would be expected to be reduced due to the shielding effect of the proposed buildings. "Tunneling" of train noise between the proposed buildings and the Bay Street apartments would not be expected and therefore ambient noise levels at the Bay Street apartments would not change as a result of implementation of the project.

Response B3-22: As evaluated within the Section IV.M, Visual Resources, there are no significant visual resources impacts. Please see Response B2-18 for a discussion of building height allowed (with the Development Bonus) within the project site. Please see Response B2-10 for a discussion of appropriate heights within the Park Avenue District Plan area.

Response B3-23: The commenter's opinion regarding the height of 1500 Park is noted. However, the tallest portion of the building is in fact 75 feet tall, as noted by the commenter in Comment B3-52.

Response B3-24: Comment noted. Please see Response B2-20 for a discussion of building height within the Park Avenue District Plan area. It should be noted that the portions of the new buildings located along Horton Street and Sherwin Avenue would be stepped down to 55 feet.

Response B3-25: Views from the Emeryville Warehouse Lofts, Blue Star Corner, or Artists' Cooperative would be considered private views, as these are not publically accessible areas. Please see Response B2-85 for a discussion of public versus private views.

Response B3-26: Impacts to fire, emergency services, police and parks are evaluated within Section IV.K, Public Services and Recreation, of the Draft EIR. No significant impacts related to the provision of public services were identified, and therefore no mitigation are required. The commenter does not identify specific impacts associated within these topics or provide additional information or analysis identifying impacts to which specific responses can be provided.

Response B3-27: See response B2-95 regarding analysis of alternatives.

Response B3-28: Please see responses B2-85 and B2-89. A discussion of the visual impacts associated with the alternatives, and how these potential impacts compare to the proposed project, is provided in Chapter VI, Alternatives.

Response B3-29: The commenter's opinion regarding density is noted.

Response B3-30: Please see Response B2-2 for a discussion of information required to be in a Project Description for a Draft EIR. Please see Master Response 2 for a discussion of the Development Bonus.

Response B3-31: The commenter notes that the "project is described as a transit-oriented development," but does not cite where in the Draft EIR that is stated. The term transit-oriented is not used to describe the project in Chapter III. Project Description. Transit in the vicinity of the project is identified in Chapter IV.C, Transportation and Circulation.

Response B3-32: The commenter's opinion regarding the applicant's objectives is noted. In Chapter III, Project Description, both the City's and the applicant's objectives are identified. The City's objectives primarily were used to evaluate the alternatives. See also Response B2-92 regarding a review of economic effects.

Response B3-33: The commenter does not specify what critical street segments were omitted from the analysis to which specific responses can be provided. Please see Responses B3-4 and B3-12 that discuss impacts and the payment of fees.

Response B3-34: Please see Responses A1-4, B1-5, and B1-6 regarding parking. The City of Emeryville has not defined a significance criteria related to parking, and does not consider parking to be a CEQA topic. In regards to the potential for secondary effects associated with cars circling the site to look for parking and leading to significant traffic congestion, air quality and greenhouse gas emissions impacts, because the project would provide parking within each parcel (see Table III-3 on page 51), it is highly unlikely that a large number of cars that couldn't find parking would cause significant secondary impacts on the environment. In addition, the project will be conditioned to develop and implement a transportation demand management (TDM) program that will include provisions for parking.

Response B3-35: Beach Street was considered for inclusion in the assessment. However, the project is expected to add less than 10 vehicle trips per lane during peak hours to this connection and further analysis was not warranted. The project is also expected to increase peak hour travel on streets south of 40th Street by less than 10 vehicle trips per lane during peak hours. This level of additional traffic does not warrant further analysis.

Response B3-36: The trip generation and MXD methodology is described starting on Page 118 of the Draft EIR. The method takes into consideration the mixture of land uses within the project site and adjacent area, as well as the level of transit service provided to the site vicinity. The MXD+ model validation included the Bay Street site, which achieved reductions up to 40 percent as compared to standard ITE rates.

The applicant will be required to implement a transportation demand management program that is subject to monitoring and adjustment.

Response B3-37: Please see Response B3-36 regarding transit.

Response B3-38: Please see Responses B3-9 and C13-4 regarding the analysis of traffic impacts and Master Response 1 regarding the City's development review process.

Response B3-39: The level of transit trip generation was also estimated for the project as presented in the Transportation Assessment. Prior to the implementation of the TDM program, approximately 70 morning peak hour and 80 evening peak hour transit trips are expected. Of these trips, most would include a bus component, with some including a bus and BART component. Between AC Transit and Emery-go-Round service, there are approximately 29 buses that serve the project area during the morning and evening peak hours, resulting in less than five additional riders per any bus in the area. Of the total transit

trips, a percentage may use the BART system. Even if all estimated transit trips used the BART system, the MacArthur BART station is served by three lines, each running 10 car trains on less than 10-minute to 15-minute headways during peak periods; as the project would add fewer than one passenger per car during peak hours, a less-than-substantial increase to BART ridership is expected.

The project would also be required to contribute to the on-going operation of the Emery-go-Round system through the business improvement district (PBID).

Response B3-40: Please see Master Response 1 for a discussion of information required to be included in an EIR Project Description. This comment does not relate to the adequacy of the information or analysis within the Draft EIR.

.

Response B3-41: Please see Master Response 1 for a discussion of information required to be included in an EIR Project Description and Master Response 2 regarding the Development Bonus and Response B1-3 regarding the provision of parks. Population and housing impacts related to the project are evaluated in Section IV.B of the Draft EIR, per the criteria of significance included therein. No significant impacts were identified and no mitigation measures are required. The analysis used the average household size for the City of 1.71 persons per US Census information, which when averaged over various types of units was adequate for evaluation of the project.

Response B3-42: The parking proposed for the project was reviewed and evaluated for informational purposes per the City's off-street parking requirements and City Code beginning on page 184 of the Draft EIR. Recommendations were made regarding the number of parking spaces per use that would be required for the project. The project would need to comply with the City's requirements per standard conditions of approval.

Details regarding the design of specific parking structures have not been developed, but parking would be provided based on the current City Code requirement, with spaces designated for some specific user groups. Some spaces would be reserved, such as for some of the residents, but other spaces would be shared between uses.

Response B3-43: Please see Response B3-9 regarding the TDM plan and Letter C15 regarding the applicant's proposed TDM plan.

Response B3-44: Please see Response B2-6 regarding a construction schedule.

Response B3-45: Please see Master Response 1 and Response B2-2 for a discussion of information required to be included in an EIR Project Description.

Response B3-46: A 2 percent or more increase in traffic volumes on a bicycle boulevard where existing traffic volumes exceed the volume threshold was established as the significance criteria. The Draft EIR notes that the project would increase traffic on those segments by more than 2 percent, resulting in a significant impact.

Response B3-47: The City has committed to monitoring all bicycle boulevards once every two years, and the Horton Street Bicycle Boulevard will be monitored as part of this process.

Response B3-48: The Draft EIR acknowledged that construction vehicles could create conflicts with other uses of the roadway system. Mitigation Measure TRANS-9 requires the preparation of a construction management plan that includes development of a comprehensive set of traffic control measures to minimize disruptions to existing uses, including scheduling deliveries for off-peak time periods, and designation of truck access routes.

Response B3-49: The City's Standard Condition of Approval require all construction hours shall be limited to 7:00 a.m. to 6:00 p.m., Monday through Friday, except that pile driving and similarly loud equipment, including but not limited to jack hammering, grading, compacting, dump trucks, generators, and chain saws shall be limited to 8:00 a.m. to 5:00 p.m., Monday through Friday. Request for construction work outside these hours and days require City Council approval. In addition, the applicant is required to designate a "Noise Disturbance Coordinator" who is be responsible for responding to any complaints about construction noise and whose name and contact information is conspicuously posted on-site.

The following measures that are not required by the City's Standard COAs are added to Mitigation Measure TRANS-9 on page 173 of the Draft EIR as noted below:

> Mitigation Measures TRANS-9: Although construction impacts are expected to be temporary, development of a construction management plan would reduce the potential for construction vehicle conflicts with other roadway users. The plan should include:
>
> - Project staging plan to maximize on-site storage of materials and equipment;
> - A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak hours; lane closure schedule and process; signs, cones, and other warning devices for drivers; and designation of construction access routes;
> - Permitted construction hours;
> - Location of construction staging;

- Identification of parking areas for construction employees, site visitors, and inspectors, including on-site locations and along the project frontage on Sherwin Avenue and Horton Street;
- Provisions for street sweeping to remove construction related debris on public streets; and
- Provisions for pavement maintenance where increased heavy vehicle traffic has the potential to degrade the pavement. ~~(LTS)~~
- Truck deliveries to the project shall occur not earlier than 7:00 a.m and not later than 4:00 p.m.
- If lane closures are required on Sherwin Avenue and/or Horton Street, the applicant shall notify property owners within 300 feet of the project site ten days in advance of the lane closures. (LTS)

Response B3-50: Section IV.J, Cultural Resources identifies and evaluates potential impacts to cultural and historical resources associated with the project related to the General Plan, the Park Avenue District Plan. A significant impact related to the renovation and reuse of Building 1-31 was identified and mitigation measures were recommended to reduce the impact to a less-than-significant level. Visual resources were identified and evaluated in Section IV.M, Visual Resources. See also Response B2-89 regarding public and private views.

Response B3-51: The commenter's opinion regarding the project's location of buildings, massing, and scale is noted. This comment does not relate to the adequacy of the information or analysis within the Draft EIR; therefore, no further response is required.

Response B3-52: Please see Responses B2-18, B2-20, and B2-21regarding compliance of the project with policies and programs.

Response B3-53: This comment is conclusory in nature. Please see Response B2-99 regarding the adequacy of the Draft EIR.

Letter
B4

ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4721
TEL: (916) 444-6201
FAX: (916) 444-6209
ewehr@adamsbroadwell.com

DANIEL L. CARDOZO
CHRISTINA M. CARO
THOMAS A. ENSLOW
TANYA A. GULESSERIAN
LAURA E. HORTON
MARC D. JOSEPH
RACHAEL E. KOSS
JAMIE L. MAULDIN
ELLEN L. WEHR

SO. SAN FRANCISCO OFFICE
601 GATEWAY BLVD., SUITE 1000
SO. SAN FRANCISCO, CA 94080
TEL: (650) 589-1660
FAX: (650) 589-5062

March 8, 2016

VIA OVERNIGHT MAIL AND EMAIL

City of Emeryville
Planning and Building Department
Attn: Miroo Desai
1333 Park Avenue
Emeryville, CA 94608
E-mail: mdesai@ci.emeryville.ca.us

Re: Comments on the Draft Environmental Impact Report for the Sherwin-Williams Development Project (SCH # 2004122083)

Dear Ms. Desai:

We are writing on behalf of Emeryville Residents for Responsible Development to submit comments on the Draft Environmental Impact Report ("DEIR") prepared by the City of Emeryville ("City") for the Sherwin-Williams Development Project ("Project"). The Project requires a General Plan Amendment, Planned Unit Development approval, Development Plan, Encroachment Permits, Tentative and Final Maps, a potential Land Swap Agreement (Project Option A), and related approvals for the development of a new mixed-use community on 10 acres of urban land. The Project includes 540 residential units, 94,600 square feet of commercial space, 3.5 acres of parks and open space, and 1 acre of new roads. 1

As explained more fully below, the City's DEIR prepared for the Project is significantly flawed and does not comply with the requirements of the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000 *et seq*. The City may not approve the Project until an adequate DEIR is prepared and recirculated for public review and comment.

printed on recycled paper

We have reviewed the DEIR and its technical appendices with assistance from technical consultants Matthew Hagemann and Jessie Jaeger, and Daniel Smith, whose comments and qualifications are attached as **Attachment A** and **Attachment B**. The City should respond to these expert comments separately and individually. 2

I. INTRODUCTION

A. Interest of Commenters

Emeryville Residents for Responsible Development ("Emeryville Residents") is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential public and worker health and safety hazards and environmental and public service impacts of the Project. The association includes Rudolph Brooks, Rances Rodriguez, the International Brotherhood of Electrical Workers Local 595, Plumbers & Steamfitters Local 342, and Sheet Metal Workers Local 104, and their members and their families who live and/or work in the City of Emeryville and the surrounding area.

Individual members of Emeryville Residents and its affiliated organizations live, work, recreate and raise their families in Alameda County, including the City of Emeryville. They would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to the health and safety hazards that exist on the Project site. Emeryville Residents has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for business and industry to expand in the region, and by making it less desirable for businesses to locate and people to live there. 3

B. Summary of Comments

As explained below, the Project will generate a multitude of impacts in a number of impact areas, including air quality, greenhouse gas emissions, hazardous materials, traffic, and water supplies. The DEIR fails to adequately characterize and analyze these impacts. Furthermore, many of the mitigation measures described in the DEIR will not in fact mitigate impacts to the extent claimed. The DEIR must be revised to resolve its inadequacies and must be recirculated for public review and comment. 4

Letter
B4
Cont.

CEQA requires recirculation of a DEIR for public review and comment when significant new information must be added to the DEIR following public review, but before certification.[1] The state CEQA Guidelines clarify that new information is significant if "the DEIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the Project or a feasible way to mitigate or avoid such an effect."[2] The purpose of recirculation is to give the public and other agencies an opportunity to evaluate the new data and the validity of conclusions drawn from it.[3] 4 cont.

As discussed below, the DEIR does not adequately describe the environmental setting from which to analyze the Project's impacts, and does not adequately describe the Project or the City's proposed mitigation measures. The Project will result in significant environmental impacts that are not analyzed in the DEIR, and there are feasible mitigation measures available to reduce significant impacts, which are not required in the DEIR. These City must address these deficiencies in a revised DEIR that is circulated for public review and comment.

II. THE CITY LACKS SUBSTANTIAL EVIDENCE TO SUPPORT ITS CONCLUSIONS, AND THE DEIR FAILS TO INCORPORATE ALL FEASIBLE MITIGATION TO REDUCE SUCH IMPACTS TO A LEVEL OF INSIGNIFICANCE. 5

CEQA has two basic purposes, neither of which the DEIR satisfies. First, CEQA is designed to inform decision makers and the public about the potentially significant environmental impacts of a Project before harm is done to the environment.[4] The DEIR is the "heart" of this requirement.[5] The DEIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[6]

---

[1] CEQA, Pub. Resources Code § 21092.1.
[2] CEQA "Guidelines," 14 Cal. Code Regs. § 15088.5.
[3] *Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* (1981) 122 Cal.App.3d 813, 822.
[4] CEQA Guidelines § 15002(a)(1); *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.
[5] *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84.
[6] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

Letter
B4
Cont.

To fulfill this function, the discussion of impacts in a DEIR must be detailed, complete, and "reflect a good faith effort at full disclosure."[7] An adequate DEIR must contain facts and analysis, not just an agency's conclusions.[8] CEQA requires a DEIR to disclose all potential direct and indirect, potentially significant environmental impacts of a project.[9]

Second, if a DEIR identifies potentially significant impacts, it must then propose and evaluate mitigation measures to minimize these impacts.[10] CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible project alternatives or mitigation measures.[11] Without an adequate analysis and description of feasible mitigation measures, it would be impossible for agencies relying upon the DEIR to meet this obligation.

Under CEQA, an EIR must not only discuss measures to avoid or minimize adverse impacts, but must ensure that mitigation conditions are fully enforceable through permit conditions, agreements or other legally binding instruments.[12] A CEQA lead agency is precluded from making the required CEQA findings unless the record shows that all uncertainties regarding the mitigation of impacts have been resolved; an agency may not rely on mitigation measures of uncertain efficacy or feasibility.[13] This approach helps "insure the integrity of the process of decision by precluding stubborn problems or serious criticism from being swept under the rug."[14]

5 cont.

In this case, the DEIR fails to satisfy the basic purposes of CEQA. The DEIR's conclusions regarding air quality, greenhouse gas emissions, hazardous materials, and traffic are not supported by substantial evidence. In preparing the DEIR, the City: (1) failed to provide sufficient information to inform the public and decision-makers about potential environmental impacts; (2) failed to accurately identify and adequately analyze all potentially significant environmental impacts;

---

[7] CEQA Guidelines § 15151; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 721-722.
[8] See *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 568.
[9] Pub. Resources Code § 21100(b)(1); CEQA Guidelines § 15126.2(a).
[10] Pub. Resources Code §§ 21002.1(a), 21100(b)(3); CEQA Guidelines § 15002(a)(2) and (3); *Berkeley Jets,* 91 Cal.App.4th at 1354; *Laurel Heights Improvement Ass'n v. Regents of the University of Cal.* (1998) 47 Cal.3d 376, 400.
[11] Pub. Resources Code §§ 21002-21002.1.
[12] CEQA Guidelines § 15126.4(a)(2).
[13] *Kings County Farm Bur. v. County of Hanford* (1990) 221 Cal.App.3d 692, 727-28.
[14] *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Ass'n.* (1986) 42 Cal.3d 929, 935.

and (3) failed to incorporate adequate measures to mitigate environmental impacts to a less than significant level. The City must correct these shortcomings and recirculate a revised DEIR for public review and comment. **5 cont.**

A. The DEIR Fails to Adequately Disclose, Analyze and Mitigate Significant Air Quality Impacts.

1. The Air Pollution Model Was Manipulated to Avoid Mitigation.

The DEIR estimated the Project's air pollution emissions using the "CalEEMod" modeling program, which allows users to input project-specific information supported by substantial evidence.[15] The modeling program's calculations for the Project are generated as "output files" that reveal what inputs and parameters were used.[16] Any deviations from the "default values" in the model must include a written description to justify why a different value was selected.[17] **6**

When reviewing the Project's CalEEMod output files, experts Matthew Hagemann and Jessie Jaeger found that a number of the values that were inputted into the model were not consistent with information disclosed in the DEIR. As a result, emissions associated with the construction and operation of the Project were underestimated. It is the opinion of Mr. Hagemann and Ms. Jaeger that a revised DEIR should be prepared to adequately assess the potential impacts that the Project will have on regional and local air quality, using appropriate input parameters.[18] **7**

a. Parks and Roads Were Excluded from the Model.

The CalEEMod output files for the Project disclose that the land uses input into the model's Project description did not include parks and open space (the Project's publicly accessible park, children's playground, sports courts, adult fitness area, bike and pedestrian trail, and dog park).[19] The model also failed to include the new Project roads and on-street parking spaces.[20] The construction and existence of **8**

[15] Hagemann and Jaeger Comments, **Attachment A**, p. 6.
[16] Hagemann and Jaeger Comments, p. 6; DEIR Appendix C.
[17] Hagemann and Jaeger Comments, p. 6.
[18] *Ibid.*
[19] *Ibid.*, pp. 6-7; DEIR Figures III-4 through III-7, and Appendix C, p. 4.
[20] *Ibid.*

these features on a significant portion of the Project site will create additional air pollutant emissions that must be included in the CalEEMod emissions model.[21] 8 cont.

b. The Model Underestimated Building Square Footage.

CalEEMod requires users to input the number of acres of a proposed land use and the total square footage of proposed buildings. The acreage "is used to determine the amount of ground to be prepared, graded, paved, etc.," while the square footage is used to determine emissions of volatile organic compounds ("VOCs") from architectural coatings and the energy impacts of a Project.[22] 9

The CalEEMod output files for the Project show that only 540,000 square feet was input for the residential land uses.[23] However, the DEIR is explicit that the Project's 540 dwelling units will occupy 621,000 square feet of building space.[24] Land use square footage is important for determining the impacts from emissions generated by architectural coatings and energy consumption. Therefore, by underestimating the square footage, the Project's operational emissions were also underestimated.[25]

c. Haul Trucks Were Excluded from the Model.

The DEIR's Transportation Impacts Analysis estimates that approximately 7,000 cubic yards of fill will be imported to the Project site during the grading phase of construction.[26] This equates to 180 one-way haul truck trips per day for a work week, or 900 total truck trips.[27] There is also a thick layer of "unsuitable" artificial fill, debris, and clay soils beneath existing building pads and throughout the Project site that will need to be removed and replaced with compacted fill to support the Project's building foundations.[28] This will increase the export and import of fill material during construction. 10 11

---

[21] Hagemann and Jaeger Comments, pp. 7-8; *see also* CalEEMod "User's Guide," p. 15 (July 2013), **Attachment C** ("all information" about a project's land uses "needs to be entered by the user otherwise no emissions will be calculated"), *available at*: http://www.caleemod.com/
[22] CalEEMod "User's Tips," p. 2 (April 2014), **Attachment D**, *available at*: http://www.caleemod.com/
[23] Hagemann and Jaeger Comments, p. 8.
[24] DEIR pp. 45, 46 (Table III-2), 358, 447, 499, and Figures III-6 and III-7.
[25] Hagemann and Jaeger Comments, p. 9.
[26] DEIR, Appendix B, p. 68.
[27] *Ibid.*, p. 69; Hagemann and Jaeger Comments, p. 10.
[28] Hagemann and Jaeger Comments, p. 9; DEIR, pp. 270, 278-279; CDM Smith, *2012 Update – Geotechnical Results and Conceptual Geotechnical Engineering Recommendations*, pp. 4, 6 (Nov. 7

However, the CalEEMod model did not include any haul truck trips throughout the course of Project construction.[29] This is a result of failing to input a value for materials that will be imported to and exported from the Project site.[30] As stated in the CalEEMod User's Guide: "The user needs to enter the amount of material imported and exported to the site in order for CalEEMod to estimate hauling trips correctly from material transport."[31] **12**

In addition to projections of required haul trips in the traffic and geological sections of the DEIR, it is very likely that additional Project-related haul trips will be required to address the persistent contamination of soil and groundwater at the Project site, including haul trips to export and dispose of contaminated soils, and to import clean replacement fill.[32] The DEIR's failure to include *any* haul trips in its calculations results in "substantially underestimated" construction-related air pollutant emissions.[33] **13**

d. The Model Improperly Calculated "Pass-By" Trips for Project-Related Traffic.

The Transportation Impact Analysis for the Project concluded that it was inappropriate to count a percentage of Project-related traffic trips as "pass-by" trips, which occur when vehicles makes an interim stop at the Project site on an already-planned trip, but do not deviate from their course.[34] Pass-by trips are not expected in large numbers because of the traffic-isolated location of the Project site, and therefore most drivers will deviate from nearby courses along 40th Street or San Pablo Avenue.[35] 40th Street is located approximately one quarter of a mile from the Project site entrance, while San Pablo Avenue is located approximately one half of a mile away.[36] **14**

As explained by Mr. Hagemann and Ms. Jaeger, in contrast to the Transportation Impact Analysis, the CalEEMod output files for the air quality **15**

2012); CDM, *Summary of Geotechnical Results and Conceptual Geotechnical Engineering Recommendations*, pp. 6, 8 (June 10, 2005).
[29] Hagemann and Jaeger Comments, p. 10; DEIR, Appendix C, p. 9.
[30] Hagemann and Jaeger Comments, pp. 9-10.
[31] CalEEMod User's Guide, p. 26, **Attachment C**.
[32] DEIR pp. 317-319; Hagemann and Jaeger Comments, pp. 9, 10.
[33] Hagemann and Jaeger Comments, p. 10.
[34] *Ibid.*; DEIR, Appendix B, p. 38.
[35] *Ibid.*
[36] Hagemann and Jaeger Comments, p. 11.

analysis assign a not-insignificant number of Project traffic trips to the pass-by category.[37] CalEEMod only assigns a trip length of 0.1 miles to pass-by trips, because they are supposed to result in no diversion from the primary trip route.[38] This is highly unlikely for the Project, and thus the "operational emissions associated with the proposed Project are greatly underestimated."[39] **15 cont.**

Mr. Hagemann and Ms. Jaeger recalculated the Project's air pollutant emissions using CalEEMod and the corrected inputs described above, and determined that significant air quality impacts would occur.[40] The DEIR must be recirculated to disclose these impacts and propose sufficient mitigation measures. **16**

e. Traffic-Related Operational Emissions Are Underestimated.

As described in the traffic discussion below, the City improperly reduced the number of Project-generated traffic trips. In turn, this resulted in an underestimation of Project-related air pollutant emissions, and this error must be accounted for in a revised DEIR analysis. **17**

B. The DEIR Fails to Adequately Disclose, Analyze and Mitigate Significant Greenhouse Gas Impacts.

1. The PG&E Energy Intensity Factor Was Improperly Reduced.

Emissions of greenhouse gases ("GHG") associated with the operation of a project include those generated by electric energy consumption. For this Project, energy consumption is the second largest source of operational GHG emissions.[41] The utility provider for the Project is Pacific Gas and Electric (PG&E).[42] **18**

Similar to other air pollutants, the CalEEMod program was used to estimate the Project's emissions of GHG. Because each utility provider relies on a different mix of energy sources, CalEEMod applies a utility-specific "GHG intensity factor" to calculate a project's emissions. For PG&E, the CalEEMod program applies a default

[37] *Ibid.*, pp. 10-11.
[38] *Ibid.*, p. 11.
[39] *Ibid.*
[40] *Ibid.*, pp. 11-12.
[41] DEIR p. 241, Table IV.E-3.
[42] DEIR p. 365.

GHG intensity factor of 641 pounds of GHG (CO2 equivalent) per megawatt hour, based on the officially reported GHG intensity factor at the time the latest CalEEMod model was released.[43]

The GHG intensity factor for a particular utility provider can be changed from the CalEEMod default value, "if a new value is identified before the defaults are updated," and if the lead agency provides *substantial evidence* to justify the change, in the remarks section of the CalEEMod output files.[44]

18 cont.

For this Project, the City changed the default GHG intensity factor for PG&E from 641 pounds to only 290 pounds, a 65% reduction.[45] This resulted in a much lower estimate of GHG emissions associated the Project's operation. The only justification provided for this substantial reduction was in the CalEEMod remarks section, which states: "Per PG&E GHG Emissions April 2013."[46] Although that referenced source is not provided, experts Hagemann and Jaeger believe that the replacement intensity factor of 290 pounds was taken from a PG&E customer document entitled "Greenhouse Gas Emissions Factors: Guidance for PG&E Customers."[47] That document estimates that PG&E's *future* GHG intensity factor may be reduced to only 290 pounds by 2020.[48]

19

The City's decision to use an estimated future GHG intensity factor is not supported by substantial evidence. First, PG&E makes clear in its customer document that future estimates are "not to be used" for GHG regulatory compliance purposes, or similar purposes.[49] This is because PG&E follows a "rigorous process" each year to "have its emissions independently verified by a third party."[50] Future estimates are not verified. Under a common-sense interpretation of the CalEEMod User's Guide, unverified future estimates do not qualify as a "new value," which is "identified" and justifies such a significant departure from the CalEEMod default value.

---

[43] CalEEMod User's Guide, Appendix D, Table 1.2, **Attachment E**.
[44] CalEEMod User's Guide, **Attachment C**, pp. 9, 13.
[45] Hagemann and Jaeger Comments, p. 8; DEIR, Appendix C, p. 4.
[46] *Ibid.*
[47] *Ibid.*; PG&E, *Greenhouse Gas Emission Factors: Guidance for PG&E Customers* (Nov. 2015), **Attachment F**, *available at*: https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf
[48] *Ibid.* (The Project will be fully operational long before 2020, *see* DEIR p. 209.)
[49] PG&E, *Greenhouse Gas Emission Factors: Guidance for PG&E Customers*, p. 1 (emphasis added).
[50] *Ibid.*, p. 2; CalEEMod User's Guide, **Attachment C**, p. 13.

Second, the PG&E customer document uses estimates of future GHG intensity factors that were made in 2010, prior to the drought, and "so the forecasts do not take into consideration the impact of the drought on hydroelectric power."[51] PG&E's intensity factor varies from year to year, based in large part on the availability of clean hydroelectric power, which produces fewer GHGs than other electric energy sources.[52] For example, 2011 was an extremely wet year and PG&E achieved its lowest GHG intensity factor of 393 pounds.[53] During the dry years of 2007 and 2008, however, PG&E's intensity factor rose to over 600 pounds.[54]

This weather-dependent variation is reflected in PG&E's most recent verified GHG intensity factor of 435 pounds for the year 2014.[55] This was higher than PG&E's verified intensity factor for the year 2013, and higher than its previously projected intensity factor for 2014.[56] California's drought and changing climate trends have made hydro-power resources less reliable. Accordingly, PG&E's unverified future projections of GHG intensity factors, which explicitly do not take these variables into account, cannot be relied upon as a substitute CalEEMod input value. Even PG&E acknowledges that its data should not be relied upon until "a thorough, third-party verification" is conducted each year.[57] The DEIR's significant modification of the CalEEMod default assumption for PG&E is unsupportable because it relies on speculative future estimates. **20**

Third, PG&E's customer document provides a more reliable method for estimating the GHG intensity factor for a year that is not yet verified: "[T]o estimate GHG emissions in a recent or future year for which an emission factor is not yet available, we recommend using an average of the five most recent coefficients available."[58] The document shows that the most recent five-year average **21**

---

[51] PG&E, *Greenhouse Gas Emission Factors: Guidance for PG&E Customers*, pp. 2, 3.
[52] PG&E article dated (Feb. 20, 2013), **Attachment G**, *available at:* http://www.pgecurrents.com/2013/02/20/pge%E2%80%99s-clean-energy-reduces-greenhouse-gas-emissions/
[53] *Ibid.*
[54] *Ibid.*
[55] PG&E website update (Feb. 5, 2016), **Attachment H**, *available at*: http://www.pgecurrents.com/2016/02/05/pge%E2%80%99s-carbon-emissions-remain-among-nation%E2%80%99s-lowest/
[56] *Compare ibid. with* PG&E, *Greenhouse Gas Emission Factors: Guidance for PG&E Customers*, p. 3.
[57] PG&E, *Greenhouse Gas Emission Factors: Guidance for PG&E Customers*.
[58] *Ibid.*

GHG intensity factor is 457 pounds.[59] In Mr. Hagemann's and Ms. Jaeger's expert opinion, "at the very least, an intensity factor of 457 lbs/MWh should have been applied to the Project, which is still much greater than the 290 lb/MWh intensity factor used within the CalEEMod model."[60] As a result, the Project's GHG emissions are greatly underestimated."[61]

CEQA requires that when analyzing a project's impacts, the lead agency "should normally limit its examination to changes in the existing physical conditions in the affected area *as they exist at the time the notice of preparation is published*."[62] This has been interpreted to mean that the lead agency does not have "carte blanche to select the conditions on some future, post-approval date."[63] The City's use of a future estimated GHG emissions rate for the Project's energy consumption violates this requirement. Based on currently available energy intensity factors, the Project's GHG emissions will be higher than estimated in the DEIR, and the DEIR should be revised to reflect this information. **21 cont.**

2. Traffic-Related Emissions Were Underestimated.

As described in the traffic discussion below, the City improperly reduced the number of Project-generated traffic trips. In turn, this resulted in an underestimation of Project-related GHG emissions, and this error must be accounted for in a revised DEIR analysis. **22**

C. Impacts From Hazardous Materials on the Project Site Are Not Adequately Disclosed, Analyzed and Mitigated.

The Project site has a long history of industrial practices that caused extensive contamination of soil and groundwater. The Sherwin Williams parcel has not achieved established cleanup goals, and the Successor Agency parcel is still considered an open site under regulatory investigation. In Mr. Hagemann and Ms. Jaeger's expert opinion, the DEIR's analysis and proposed mitigation measures are inadequate, and the DEIR should not be certified until a thorough investigation is made regarding the suitability of the Project site for the proposed land uses.[64] **23**

---

[59] *Ibid.*, p. 3.
[60] Hagemann and Jaeger comments, p. 9.
[61] *Ibid.*
[62] CEQA Guidelines § 15126.2 (emphasis added); *see also id.* § 15125(a).
[63] *Sunnyvale W. Neighborhood Assn. v. City of Sunnyvale City Council* (2010) 190 Cal.App.4th 1351, 1379.
[64] Hagemann and Jaeger Comments, p. 2.

1. Disturbance of the Sherwin Williams Parcel Poses a Significant and Unmitigated Risk to the Health of Construction Workers, Future Residents, and Recreational Users of the Project Site.

The Sherwin Williams parcel was used for manufacturing of lead- and arsenic-based pesticides, lacquer, and paint for almost 100 years, and was first designated as a contaminated site more than 25 years ago. In 2012, the California Department of Toxics Substances Control ("DTSC") approved the excavation and removal of contaminated soil "hot spots" on the site, coupled with a strategy of "natural attenuation" for the contamination that remained on the site, a monitoring plan for soil vapor and groundwater, and a land use covenant that prohibits further disturbance of the site without further investigation and DTSC approval.[65] 24

Regarding the Sherwin Williams parcel, there is substantial evidence that the parcel continues to pose a significant risk of exposure to contamination, at levels that are unhealthy for construction workers, residents, and recreational users. This is reflected in the limited soil vapor and groundwater monitoring results from the northern part of the parcel where remediation activities occurred, and evidence of unremediated soil and groundwater contamination on the southern part of the parcel, including the area containing the "Building 35" concrete building pad, which was constructed in the mid-1960's and has not yet been uncovered.[66]

Following soil excavation and installation of slurry walls to control groundwater flow on the northern part of the parcel, Sherwin Williams monitored soil gas three times, at nine monitoring locations, between June 2012 and June 2013.[67] After this first year of soil gas monitoring, which produced highly variable results, Sherwin Williams abandoned seven of the soil monitoring locations, and maintained two in case future monitoring was needed (locations "06" and "08"). Soil gas sampling ceased after June 2013. The soil gas samples showed benzene and other contaminants of concern were above regulatory health screening levels.[68] 25

[65] DEIR, pp. 298-299.
[66] Hagemann and Jaeger Comments, p. 3.
[67] CDM Smith, *Updated Soil Gas Data Summary and Evaluation Report*, p. 1-1 and Table 1 (Aug. 15, 2013), found in DEIR, Hazardous Materials Reference Documents, .pdf pp. 1200 and 1217 (soil gas vapor monitoring points were constructed in June 2012 and monitored three times through June 2013).
[68] DEIR, p. 300.

Benzene is a known human carcinogen and may pose a risk to construction workers and future occupants who may be exposed to soil vapors.[69]

Monitoring locations 06 and 08 are outside the area where soil was excavated in 2012.[70] At monitoring location 06, the level of benzene in soil gas was 18 to 75 times above the safe level for residential use, and ethylbenzene was 145 times above the safe level.[71] The highest level of naphthalene on the site was measured at monitoring location 08, at 2.4 times above the safe level.[72] The last soil gas monitoring report, published in August 2013, speculated that these high levels may be attributable to contaminated soil, in addition to contaminated groundwater, because the soil at those two monitoring locations was not excavated as part of the previous remediation activities.[73] **25 cont.**

Groundwater monitoring still occurs on the northern part of the Sherwin Williams parcel. A recent report based on 2014 samples from four groundwater monitoring wells shows elevated levels of VOC's, including the contaminants dichloroethane and benzene.[74] Samples from a larger number of wells that were tested for arsenic exceeded the arsenic cleanup goal for groundwater, with the highest levels found outside of the area where soil was excavated and removed.[75] These samples showed groundwater arsenic concentrations on portions of the Sherwin Williams site that were not excavated that were 7 to 50 times higher than the cleanup goal.[76] **26**

In addition to evidence of elevated soil vapor and groundwater contamination on the northern part of the Sherwin Williams parcel, particularly in those areas that were not excavated, a significant portion of the southern part of parcel includes the original concrete building pad for the Sherwin Williams "Building 35," which was constructed in the mid-1960's and demolished in 2007. The existing footprint of the building pad is approximately 1.8 acres and covers more than 20% of the entire

---

[69] Hagemann and Jaeger Comments, p. 2 (citing Benzene "ToxFAQs," **Attachment I**, *available at*: http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=38&tid=14).
[70] CDM Smith, *Updated Soil Gas Data Summary and Evaluation Report*, Drawing 1, .pdf p. 1223.
[71] *Ibid.*, Table 3, .pdf p. 1219.
[72] *Ibid.*, Table 3, .pdf p. 1220.
[73] *Ibid.*, report pp. 4-2 to 4-3, .pdf pp. 1213-1214.
[74] Arcadis, *Data Summary Report for Groundwater Monitoring Activities for the Period from July 1, 2014 through December 31, 2014*, Table C-1 (Jan. 8, 2015).
[75] *Ibid.*, .pdf p. 444 and Figure 4, .pdf p. 455.
[76] *Ibid.*

Sherwin Williams parcel.[77] The DEIR does not describe the extent of any previous investigations to determine potential levels of contamination in soil, groundwater, and soil vapor beneath this building pad. **26 cont.**

Prior to Sherwin William's acquisition of this area and construction of Building 35, the property beneath Building 35 was owned by the Southern Pacific Transportation Company and was occupied by seven sets of railroad tracks, from at least the late 1920's through the early 1960's.[78] The railroad tracks were removed and Building 35 was constructed and used by Sherwin Williams for storing products and chemicals, and later used for product manufacturing.[79]

There is a risk of previously unidentified contamination beneath Building 35. Similar to the conclusions in the 2006 "Phase I Environmental Site Assessment" for the adjacent Successor Agency parcel, Mr. Hagemann and Ms. Jaeger conclude that the potential environmental concerns are related to the former use of this area as a railroad spur, including the "possible presence of petroleum hydrocarbons, petroleum-based solvents and thinners, chlorinated solvents, volatile and semi-volatile organic compounds, polynuclear aromatic hydrocarbons, polychlorinated biphenyls, and heavy metals, based on potential historic applications of arsenic-based herbicides to railroad tracks and the industrial land uses in the vicinity of the subject property that may have been serviced by the railroad tracks, including the Sherwin Williams plant."[80] **27**

There is further evidence of contamination on the Sherwin Williams parcel outside of the area where soil was excavated and removed. First, a 2012 geologic report tested soils on the parcel at four locations outside of the excavated area, and noted that the soil in all four locations included a layer of "black, gray and brown clay" that was "described as having a petroleum-like odor."[81] Second, the underground slurry wall on the parcel was purposefully breached in 2012 to provide a point of groundwater outflow for the "southern portion of the arsenic plume" on the parcel, which was described as flowing "along or under" Building 35 and could not be contained "due to the presence of Building 35."[82] **28**

---

[77] Hagemann and Jaeger Comments, p. 3.
[78] Erler & Kalinowski, *Phase I Environmental Site Assessment, UPRR Parcel D*, p. 7 and Figures 3, 4, and 5 (2006); CDM, *Remedial Action Plan* ("*RAP*"), pp. 2-2 and 2-3 (June 11, 2010).
[79] Erler & Kalinowski, *Phase I*, *ibid.*, p. 7.
[80] Hagemann and Jaeger Comments, p. 3 (citing *ibid.*, p. 15).
[81] CDM Smith, *2012 Update – Geotechnical Results and Conceptual Geotechnical Engineering Recommendations,* pp. 4, 6, and Figure 1 (Nov. 7, 2012).
[82] *RAP*, pp. 2-13, 2-28, 2-29, 4-9.

DTSC has not yet provided public comments about the suitability of the Sherwin Williams parcel for residential use. According to Mr. Hagemann and Ms. Jaeger, it is therefore "speculative at this time to assume the Sherwin Williams parcel is suitable for residential housing in light of data which shows contamination above cleanup goals, and potential additional contamination sources on the subject property."[83] This does not, however, alleviate the City of its obligation to fully investigate and disclose the foreseeable environmental impacts of the Project. In Mr. Hagemann and Ms. Jaeger's opinion, the DEIR should be revised to include a "definitive determination, backed by a Project-specific human health risk assessment, that the Sherwin Williams parcel is safe for human occupancy."[84] **29**

The City has improperly deferred investigating and disclosing the levels of contamination that persist throughout the Project site, and failed to adequately analyze the remediation strategies and mitigation measures that will be needed to ensure protection of human health, along with air quality and greenhouse gas emissions limits. A lead agency may not put off an analysis of what mitigation measures are required, or call for an unspecified mitigation plan to be devised based on future studies.[85] Moreover, an agency may not rely on mitigation measures of uncertain efficacy or feasibility.[86] **30** **31**

The DEIR acknowledges that contamination remains on the parcel above safe levels, and that pursuant to the Land Use Covenant on the parcel, DTSC will require further investigation, excavated soil management and disposal procedures, and further engineering controls to address the contamination.[87] There are foreseeable environmental impacts associated with the need to further remediate contaminated soil and groundwater on the Project site. These impacts include an increase in construction-related air pollution and GHG emissions from excavators, haul trucks, and related equipment.[88] The City cannot hide its head in the sand and attempt to avoid analyzing these impacts as part of the DEIR. **32** **33**

---

[83] Hagemann and Jaeger Comments, p. 4.
[84] *Ibid.*
[85] CEQA Guidelines § 15126.4(a)(1)(B); *City of Long Beach v. Los Angeles School Dist.* (2009) 179 Cal.App.4th 889, 915; *Communities for a Better Env't v. City of Richmond* (2010) 184 Cal.App.4th 70, 95; *San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645, 669.
[86] *Kings County Farm Bur. v. County of Hanford* (1990) 221 Cal.App.3d 692, 727-28.
[87] DEIR, pp. 315-319.
[88] Hagemann and Jaeger Comments, p. 4.

The City's proposed mitigation measures suggest that a future Soil Management Plan ("SMP") will be adequate to protect construction worker health, and that a future investigation of soil vapor effects on indoor air quality will be adequate to protect residents and recreational users of the Project site.[89] Mr. Hagemann and Ms. Jaeger conclude that these measures are not nearly stringent enough to reduce the potential impacts of the Project to a less-than-significant level. They recommend that to protect public health the City must first require, as part of its investigation of potential environmental impacts pursuant to CEQA, a thorough investigation and disclosure of the extent and character of residual contamination on the entire parcel, particularly those areas that are outside of the previous excavation zone, and under Building 35. The City should then ensure safe and proper remediation of any unsafe levels of contaminants, including the preparation of a Human Health Risk Assessment ("HHRA") to be included in a revised DEIR. A HHRA is a standard assessment to determine if a site will be safe for human occupancy following remediation. The City should also require an enforceable worker Health and Safety Plan, which is also a standard practice when redeveloping a contaminated site.[90] **34**

Finally, the potential impacts of any residual contamination left in place on the Project site will not be limited to vapor intrusion effects on indoor air quality. The Project will include numerous parks and open space features that could expose children and others to unsafe levels of contaminated soil and soil vapor. The DEIR must be revised to include a HHRA that adequately addresses these risks. **35**

2. <u>Disturbance of the Successor Agency Parcel Poses a Significant and Unmitigated Risk to the Health of Construction Workers, Future Residents, and Recreational Users of the Project Site</u>.

A regulatory determination that the Successor Agency parcel is suitable for housing or public park uses has not been made. In fact, the DEIR fails to identify the status of the cleanup on the Successor Agency parcel, stating only: **36**

> DTSC stated that they could not concur with the NFA [no further action] if concentrations remain above residential levels without a deed restriction.[91]

---

[89] DEIR pp. 27-28.
[90] Hagemann and Jaeger Comments, p. 4.
[91] DEIR, p. 304.

There is no evidence of a proper deed restriction on the Successor Agency parcel, and DTSC's Envirostor Website indicates that the regulatory status of the Successor Agency parcel is open.[92] A 2009 post-cleanup report obtained from the City indicates that contaminants remain in the soil on the Successor Agency parcel in excess of residential-scenario cleanup goals, including petroleum hydrocarbons (diesel and motor oil), arsenic, cadmium, and lead.[93] The cleanup activities conducted by the City in 2008 were not completed because soil excavation could not proceed under adjacent buildings, railroad tracks, and sidewalks.[94] **36 cont.**

Other contaminants including VOCs may also be present beneath the Successor Agency parcel in soil vapor.[95] These contaminants, which may have originated from the Sherwin Williams parcel, could include benzene, a known human carcinogen. Workers may be exposed to vapors during earthwork activities and put at risk to health effects which include, in addition to cancer, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness.[96] Future residents and recreational users may be subject to similar health effects if the source of the contaminants in soil, groundwater, and soil vapor is not addressed.[97]

The DEIR states that vapor intrusion at the Successor Agency parcel may pose a potentially significant hazard for future occupants if residential development proceeds on the Successor Agency parcel under Option A.[98] To address this potential, the DEIR includes Mitigation Measure HAZ-2b, which requires an evaluation of soil gas conditions and indoor air quality, with approval from DTSC before residential housing can be built on the Successor Agency parcel. This mitigation is inadequate. Reliance on a future evaluation of vapor intrusion risks constitutes deferred mitigation. **37**

Before the City approves the Project it must investigate and disclose the extent of contamination that remains on the Successor Agency parcel, and must ensure that proper mitigation measures are in place to protect not only future

---

[92] Hagemann and Jaeger Comments, p. 4 (citing Envirostor Website, **Attachment J**, *available at*: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60000833).
[93] Hagemann and Jaeger Comments, p. 4 (citing Erler & Kalinowski, *Remedial Action Completion Report, UPRR Parcel D*, p. 16 (Jan. 30, 2009)).
[94] DEIR, p. 301.
[95] DEIR, p. 316; Hagemann and Jaeger Comments, p. 5.
[96] Benzene ToxFAQs, **Attachment I**.
[97] Hagemann and Jaeger Comments, p. 5.
[98] DEIR, p. 316.

residents, but also construction workers, and residents who live across the street from the Project site and may be affected by construction releases. **37 cont.**

As with the Sherwin Williams parcel, "studies of vapor intrusion and soil contamination at the Successor Agency parcel should be conducted for inclusion in a revised DEIR."[99] A clear delineation of areas where soil contamination remains above residential cleanup goals should also be included in a revised DEIR. Only with proper disclosure of contamination conditions can the potential impacts on human health of residents and construction workers be understood. **38**

Finally, it is not enough to require a soil vapor investigation only if residential housing is constructed on the parcel under Project Option A, but not if a public park is constructed under Project Option B.[100] Recreational users of the public park, including children and Project residents, must be protected from unhealthy levels of exposure to contaminated soil and soil vapor.

D. Traffic Impacts Are Underestimated and Unmitigated

The DEIR uses a completely new approach to analyzing the Project's impacts on the City's transportation network. Expert Daniel Smith, PE, reviewed the DEIR's transportation analysis and found fundamental flaws that render the DEIR critically deficient. As a result, traffic impacts are underestimated and unmitigated. **39**

1. <u>The City's Traffic Consultant Used a New Self-Developed Transportation Model that Underestimates Project Traffic.</u>

The DEIR estimates motor vehicle trip generation using a new method of analysis, the "MXD+" model for mixed-use developments, which was only recently self-developed by the City's transportation analysis firm. According to Mr. Smith, the City's reliance on the MXD+ model significantly understates vehicle trip totals associated with Project operation, because the new method is not reflective of Emeryville-specific considerations. **40**

The MXD+ model assumes that a full 35% of all associated with the Project on a daily and weekend basis, and 40% of all trips taken during peak hours, will not involve the use of a motor vehicle, but will instead be made by walking, bicycling, taking public transit, or by residents utilizing the commercial space on the Project

[99] Hagemann and Jaeger Comments, p. 5.
[100] *Ibid.*, p. 6.

site to avoid driving elsewhere.[101] The MXD+ model therefore deducts 40% from the baseline trip level established through the conventional Institute of Transportation Engineers' "*Trip Generation*" rates.[102] **40 cont.**

As explained by Mr. Smith, the results of the MXD+ model lack a relationship to the overall transportation conditions in Emeryville.[103] There are a number of mixed-use developments in Emeryville that the traffic consultant could have looked to in order to calibrate and verify the accuracy of the MXD+ model, but did not.[104] The MXD+ model includes many disclaimers that the model's predictions have not been validated, are only accurate with respect to the "underlying research" of mixed-use project data, and that alternative methods are suggested to validate the MXD+ method "with respect to local data."[105] Mr. Smith concludes that the City's failure to calibrate or validate the model for use in Emeryville resulted in an unreliable trip generation estimate.[106] **41**

Similarly, although the DEIR states that the MXD+ model is "approved for use by the US EPA," the cited EPA public relations release merely states that the model has been validated against the data used to create it.[107] The DEIR also states that the MXD+ model is "peer reviewed," but one of the cited references was authored by the person who developed the data to create the MXD+ model, while the other cited reference is a comparative evaluation of several models is inconclusive about their accuracy and states that the evaluation "is not adequate to fully assess the performance of available methods."[108] **42**

Mr. Smith also criticizes the decision to deduct its unreliable and unverified estimate of a 35% to 40% reduction in traffic trips from the traditional "ITE" trip generation rate, noting that the ITE rate is focused on traffic trips only, and does not reflect the fact that its data sources, particularly those sites studied in recent versions of the trip generation manual, necessarily include some level of walking, bicycling and transit trips.[109] In Mr. Smith's professional opinion "it is simply wrong to presume that the ITE *Trip Generation* data on motor vehicle trips at residential **43**

---

[101] Smith Comments, **Attachment B**, p. 2.
[102] *Ibid.*
[103] *Ibid.*, p. 3.
[104] *Ibid.*, p. 4.
[105] *Ibid.*
[106] *Ibid.*, p. 6.
[107] *Ibid.*; DEIR p. 119, fn. 8.
[108] Smith Comments, p. 5.
[109] *Ibid.*, p. 6.

developments reflects a 'zero' baseline of transit, walking, and bicycle trips and zero internalization of trips."[110] **43 cont.**

2. The Project Area Is Not a Highly Walkable, Bicycle-friendly Setting.

Contrary to the statement in the DEIR that the Project area is a walkable, bicycle-friendly area, this is not the case.[111] The Emeryville General Plan describes how the pedestrian and bicycle travel is impeded by areas "with no sidewalks, where pedestrians must share the street with motor vehicles and bicyclists," and the industrial and commercial areas where "large blocks [and] railroad and freeway corridors act as barriers to pedestrian travel."[112] The General Plan also describes the "barriers to safe and convenient bicycling," including auto-oriented retail uses and streets with high vehicle traffic volumes.[113] **44**

Mr. Smith provides a good overview of the significant physical barriers to walking and bicycling that exist in the vicinity of the Project site, including the Union Pacific railroad tracks to the west, three non-pedestrian and non-bicycle-friendly railroad overcrossings, and nearby intersections where pedestrian and bicycle crossings are restricted, dangerous, and intimidating.[114] Mr. Smith also notes that Emeryville has an automobile-dependent development structure that includes thousands upon thousands of public parking spaces at nearby big-box stores.[115]

Finally, Mr. Smith points out that the Project developer has proposed only one fewer than the *maximum* number of Project parking spaces allowed under the City Code, which strongly indicates that the developer believes the Project will only be marketable to vehicle drivers.[116] Given these circumstances, the City abused its discretion in reducing the Project's estimated vehicle trips by 35% to 40%. **45**

---

[110] *Ibid.*, p. 7.
[111] DEIR, p. 118.
[112] Emeryville General Plan, p. 3-14, **Attachment L**.
[113] *Ibid.*
[114] Smith Comments, pp. 7-12.
[115] *Ibid.*, p. 13.
[116] *Ibid.*

3. The DEIR Relies on New "VMT" and "QOS" Significance Criteria That Are Not Yet Adequately Developed, and Ignores Significant Traffic Impacts Under the Traditional "LOS" Criteria.

As explained by Mr. Smith, the DEIR "abandons conventional Level of Service ("LOS") standards of significance for traffic impacts" and instead bases the transportation and analysis on:

> a) a new vehicle miles traveled ("VMT") significance criterion that, at the time the DEIR transportation analysis was completed, had yet to be adopted, was still subject to change, and for which no explicit computational procedures and significance thresholds had yet been defined, and
>
> b) amorphous Quality of Service ("QOS") criteria for which thresholds of significance are only nominatively defined by the DEIR's transportation analysts themselves.

46

Mr. Smith's review of this analysis reveals that the DEIR understated the Project's traffic impacts using unreliable methodologies. [117] Acknowledging that the VMT and QOS criteria are still under development are still subject to change, had the City used the conventional LOS method of analysis it would have found *four* intersections where the Project will have significant traffic impacts.[118] Accordingly, the DEIR fails to address potential mitigation to alleviate these impacts, including stringent transportation demand management measures.[119] The DEIR should be revised to accurately portray the Project's trip generation rate and significant traffic impacts, and further mitigation measures should be imposed.

E. Project Description and Mitigation Measures Are Vague and Uncertain.

47

The DEIR does not meet CEQA's requirements because it fails to include an accurate and complete Project description, and several of its mitigation measures are vague and unenforceable. California courts have also repeatedly held that "an accurate, stable and finite project description is the *sine qua non* of an informative

[117] *Ibid.*, pp. 14-15.
[118] *Ibid.*
[119] *Ibid.*, p. 15.

and legally sufficient [CEQA document]."[120] CEQA requires that a project be described with enough particularity that its impacts can be assessed.[121] "A curtailed or distorted project description may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental costs."[122] As articulated by the court in *County of Inyo v. City of Los Angeles*, "a curtailed, enigmatic or unstable project description draws a red herring across the path of public input."[123] Without a complete project description, the environmental analysis under CEQA is impermissibly limited, thus minimizing the project's impacts and undermining meaningful public review.[124] **47 cont.**

The DEIR does not adequately describe how contaminated groundwater will be treated and conveyed offsite during construction dewatering operations. The DEIR also fails to adequately describe how stormwater will be treated and conveyed offsite once the Project is constructed.[125] For example, the Project plans show that stormwater lines will be upgraded along Sherwin Avenue, but do not explain the extent of the required upgrades, nor disclose the potentially significant contamination that will be released when those lines are replaced. **48** **49**

Furthermore, a lead agency may not put off an analysis of what mitigation measures are required, or call for an unspecified mitigation plan to be devised based on future studies.[126] A lead agency may not rely on mitigation measures of uncertain efficacy or feasibility.[127] Mitigation Measure AIR-1 requires construction equipment to meet the most recent "certification standards" for clean engines, but does not indicate what those standards are. There are numerous available air pollutant control measures that can be imposed by a lead agency to mitigate for construction-related air pollution, including a requirement that "Tier 3" or the most recent "Tier 4" clean-burning engines be used. The DEIR must include specific mitigation requirements for what type of pollution controls will be required, and the City must thereafter monitor and enforce those requirements to ensure compliance. **50**

---

[120] *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.
[121] *Id.* at 192.
[122] *Id.* at 192-193.
[123] *Id.* at 197-198.
[124] *See, e.g., Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1988) 47 Cal.3d 376.
[125] *See* DEIR pp. 58,
[126] CEQA Guidelines § 15126.4(a)(1)(B); *City of Long Beach v. Los Angeles School Dist.* (2009) 179 Cal.App.4th 889, 915; *Communities for a Better Env't v. City of Richmond* (2010) 184 Cal.App.4th 70, 95; *San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645, 669.
[127] *Kings County Farm Bur. v. County of Hanford* (1990) 221 Cal.App.3d 692, 727-28.

Furthermore, the "LID" treatment requirements in Mitigation Measure HYD-1b are entirely vague.[128] Infiltration of stormwater has been limited on the Project site by DTSC.[129] Accordingly, the City must identify what types of stormwater treatment options are available on the site, and determine whether the Project will comply with the requirements of the City's Municipal Stormwater Permit. **51**

F. The Water Supply Assessment Is Eleven Years Old and Inadequate.

California law requires that "at the time" a lead agency determines to prepare an EIR for a proposed project it must identify the public water service provider for the project and request the preparation of a Water Supply Assessment ("WSA").[130] The CEQA Guidelines state that the water supplier should determine whether the water demand for the project was included in its "most recently adopted" urban water management plan.[131] The main purpose of a WSA is to discuss whether the public water supplier will be able to meet the project's water demand for 20 years into the future in addition to existing and planned future uses.[132] Thus, a WSA is expected to be a *current* document at the time the lead agency considers whether to approve a proposed project. **52**

The City asked the East Bay Municipal Utilities District ("EBMUD") to prepare a WSA for a prior version of a development Project on the Sherwin Williams site in January 2005, only several years after the state-law WSA requirements were enacted. The resulting WSA prepared by EBMUD was less than five pages long with only one attached chart showing EBMUD's projected customer demand for water and its projected water supply through 2020.[133] The five-page WSA relied on EBMUD's 2000 Urban Water Management Plan ("UWMP"). It did not include development of the Successor Parcel.[134]

A lead agency may only rely on a WSA that was prepared for a larger project or a previous version of the same project if that prior WSA was in compliance with

[128] DEIR p. 290.
[129] *Ibid.* p. 291.
[130] Water Code § 10910(b).
[131] CEQA Guidelines § 15155(b)(1).
[132] CEQA Guidelines § 10910(c)(3).
[133] Letter from William Kirkpatrick, EBMUD to Miroo Desai, City of Emeryville dated March 10, 2005.
[134] *Ibid.*, p. 1.

Letter
B4
Cont.

all of the requirements of the Water Code and included all required elements of a WSA.[135] The previous WSA cannot be relied upon if changes in circumstances or conditions have substantially affected the ability of the public water system to provide sufficient water supplies or significant new information becomes available regarding the public water system's water supplies.[136] **52 cont.**

In conclusion, The Project presents significant environmental issues that must be addressed prior to Project approval. The DEIR fails to include an adequate analysis of and mitigation measures for the Project's potentially significant impacts, and its conclusions lack substantial evidence as required by CEQA. The DEIR must be revised and recirculated. **53**

Sincerely,

Ellen L. Wehr

ELW:ljl

Attachments
(websites provided and attachments submitted on compact disc)

---

[135] Water Code § 10910(h); CEQA Guidelines §§ 15155(a)(4), (d).
[136] *Id.*

ATTACHMENT A

Letter
B4
Attach A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

March 8, 2016

Ellen Wehr
Adams Broadwell Joseph & Cardozo
601 Gateway Blvd., Suite 1000
South San Francisco, CA 94080

Subject: Comments on the Sherwin-Williams Development Project (SCH 2004122083)

Dear Ms. Wehr:

We have reviewed the January 2016 Draft Environmental Impact Report (DEIR) and associated appendices for the proposed Sherwin-Williams mixed-use development ("Project") located in Emeryville, California. The proposed Project includes development of 540 units of residential space, 94,600 square feet of commercial space, and construction of a park and open space, a children's playground, an adult fitness space, and a central green. The project site consists of two parcels, one which is city-owned and the other which is owned by Sherwin-Williams Company. There are two options being proposed for development of this Project. Option A would integrate the City-owned parcel directly into the development and places the location of the park more centrally within the Project. Option B would have the city-owned parcel remain as a separate open space located adjacent to the development. The primary difference between Option A and Option B is where the location of the parks would be as well as the number of garage parking spaces (982 vs. 929) (DEIR, p. 46). **54 cont.**

Our review concludes that the DEIR fails to adequately evaluate the Project's Hazards and Hazardous Materials impacts and Air Quality and Greenhouse Gas impacts. The Sherwin Williams parcel has not been cleaned up to regulatory agency specifications and the Successor Agency Parcel is an open case under regulatory investigation. The DEIR modeled the Project's construction and operational criteria air pollutant and greenhouse gas (GHG) emissions using incorrect input parameters. As a result, the Project's emissions are greatly underestimated. A revised DEIR should be prepared to address these issues and additional mitigation measures should be identified and incorporated, where necessary.

Hazards and Hazardous Waste

Hazards Have Not Been Adequately Evaluated

The Project site has a long history of industrial practices that have led to extensive contamination of soil, soil vapor and groundwater. The Sherwin Williams parcel has not achieved established cleanup goals **55**

and the Successor Agency Parcel has not been evaluated for vapor intrusion and remains an open site under regulatory investigation. Until these parcels have been cleared for residential use, the DEIR should not be certified. 55 cont.

Sherwin Williams Parcel

The Sherwin Williams parcel, which has been the location of paint and pesticide manufacturing for over 100 years, has been the subject of regulatory scrutiny on portions of the parcel for the past 20 years and is under the oversight of the California Department of Toxics Substances Control (DTSC). The DTSC is currently overseeing the operation and maintenance of a remedy that was completed in 2012 on the northern portion of the Sherwin Williams parcel, for contaminated soil, soil vapor, and groundwater (DEIR, p. 298). A land use covenant was approved by DTSC in 2012 that dictates environmental restrictions, because volatile organic compounds (VOCs) and arsenic remain in groundwater and soil gas above the unrestricted cleanup goals in the remedy (DEIR, p. 299).

The record shows that those portions of the Sherwin Williams site that were not subject to active remediation through soil excavation and removal continue to pose a risk of contamination at levels that are unhealthy for construction workers, future residents, and recreational users of the Project site. This is reflected in soil vapor and groundwater monitoring results from un-excavated areas on the northern part of the parcel, and evidence of potential soil and groundwater contamination on the southern part of the parcel, including the area that contains the "Building 35" concrete building pad, which has not yet been uncovered. 56

Part of the northern portion of the Sherwin Williams parcel was subject to soil excavation, removal and remediation in 2011 to 2012. Monitoring of soil gas in and around that area occurred three times, at nine monitoring points, between June 2012 and June 2013.[1] After only one year of soil gas monitoring, which produced highly variable results, seven of the soil monitoring points were abandoned, and two were maintained in case future monitoring was needed (points "06" and "08"). Soil gas sampling ceased after June 2013. The soil gas sampling, as cited in the DEIR, showed benzene and other contaminants of concern above regulatory screening levels (the California Human Health Screening Levels) (DEIR, p. 300). Benzene is a known human carcinogen[2] and may pose a risk to construction workers and future occupants who may be exposed to vapors.

Monitoring points 06 and 08 are located outside of the area where soil was excavated as part of the cleanup on the northern part of the parcel.[3] At monitoring point 06, the level of benzene in soil gas was 18 to 75 times above the safe level for residential use, and the level of ethylbenzene was 145 times above the safe level.[4] The highest level of naphthalene on the site was measured at point 08, and was 2.4 times above the safe level.[5] The last soil gas monitoring report, published in August 2013, speculated

[1] CDM Smith, *Updated Soil Gas Data Summary and Evaluation Report*, p. 1-1 and Table 1 (Aug. 15, 2013), found in DEIR, Hazardous Materials Reference Documents, .pdf pp. 1200 and 1217 (soil gas vapor monitoring points were constructed in June 2012 and monitored three times through June 2013).
[2] http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=38&tid=14
[3] *Ibid.*, Drawing 1, .pdf p. 1223.
[4] *Ibid.*, Table 3, .pdf p. 1219.
[5] *Ibid.*, .pdf p. 1220.

that these high levels may be attributable to contaminated soil, in addition to contaminated groundwater, because the soil was not excavated and removed.[6]

Monitoring of groundwater continues on the northern part of the Sherwin Williams parcel. A recent report based on 2014 samples of VOC's from four groundwater monitoring wells showed elevated levels of the contaminants dichloroethane and benzene.[7] Moreover, the majority of wells tested for arsenic in 2014 on the Sherwin Williams parcel exceeded the arsenic cleanup goal for groundwater, with the highest levels found outside the area where soil was excavated and removed.[8] These wells had groundwater arsenic concentrations that were 7 to 50 times higher than the cleanup goal.[9] **56 cont.**

In addition to evidence of elevated soil vapor and groundwater contamination in the non-excavated portions of the northern part of the Sherwin Williams parcel, a significant portion of the southern part of parcel includes the concrete building pad for Sherwin Williams Building 35. The existing footprint of this building pad is approximately 1.8 acres and it covers more than 20% of the Sherwin Williams parcel. The extent of previous investigations to determine the levels of contaminated soil, groundwater, and soil vapor beneath this concrete building pad is not clear.

Prior to Sherwin William's acquisition and construction of Building 35, the property beneath Building 35 was owned by the Southern Pacific Transportation Company and occupied by seven sets of railroad tracks, from at least the late 1920's through the early 1960's.[10] Building 35 was then constructed by Sherwin Williams, and the site was used to store products and chemicals, and was later used for product manufacturing.[11] There is a risk of previously unidentified contamination beneath Building 35. Similar to the conclusions in the 2006 "Phase I Environmental Site Assessment" for the adjacent Successor Agency parcel, we conclude that potential environmental concerns related to the former use of this area as a large railroad spur area include the possible presence of petroleum hydrocarbons, petroleum-based solvents and thinners, chlorinated solvents, volatile and semi-volatile organic compounds, polynuclear aromatic hydrocarbons, polychlorinated biphenyls, and heavy metals, based on potential historic applications of arsenic-based herbicides to railroad tracks and the industrial land uses in the vicinity of the subject property that may have been serviced by the railroad tracks, including the Sherwin Williams plant.[12] **57**

There is further evidence of contamination on the Sherwin Williams parcel outside of the area where soil was excavated and removed. First, the 2012 geologic exploration on the parcel included soil profiles at four locations outside of the excavated area. The resulting report notes that the soil at all four locations included a layer of "black, gray and brown clay" that was "described as having a petroleum-like **58**

---

[6] *Ibid.*, p. 4-2 to 4-3, .pdf pp. 1213-1214.
[7] Arcadis, *Data Summary Report for Groundwater Monitoring Activities for the Period from July 1, 2014 through December 31, 2014*, Table C-1 (Jan. 8, 2015).
[8] *Ibid.*, .pdf p. 444 and Figure 4, .pdf p. 455.
[9] *Ibid.*
[10] Erler & Kalinowski, *Phase I Environmental Site Assessment, UPRR Parcel D*, p. 7 and Figures 3, 4, and 5 (2006); CDM, *Remedial Action Plan* ("*RAP*"), pp. 2-2 and 2-3 (June 11, 2010).
[11] Erler & Kalinowski, *Phase I*, *ibid.*, p. 7.
[12] *Ibid.*, p. 15.

odor."[13] Second, the slurry wall on the parcel was breached in 2012 in order to provide a point of groundwater outflow for the "southern portion of the arsenic plume," which flows "along or under" Building 35 and cannot be contained "due to the presence of Building 35."[14] **58 cont.**

DTSC has not provided public comments about the suitability of the Sherwin Williams parcel for housing as described in the DEIR. DTSC is planning to comment on the use of the Project site for unrestricted land use in the near future (personal communication, Elena Joy Pelen, February 26, 2016). It is therefore speculative at this time to assume the Sherwin Williams parcel is suitable for residential housing in light of data which shows contamination above cleanup goals, and potential additional contamination sources on the subject property. **59**

The DEIR should be revised to include a definitive determination, backed by a Project-specific human health risk assessment, that the Sherwin Williams parcel is safe for human occupancy. The City cannot defer the need to investigate contamination throughout the Project site and analyze the remediation strategies and protective measures that will be used to ensure the protection of human health. The foreseeable environmental impacts associated with further required cleanup of contaminated soil and groundwater on the Project site will increase construction-related air pollutant emissions and GHG emissions. Furthermore, the City's failure to properly investigate and ensure adequate cleanup parameters for residential and park uses will likely have an adverse affect on the health and safety of Project occupants, while the City's failure to analyze and enforce a stringent worker Health and Safety Plan could adversely impact construction worker health. **60** **61** **62**

Successor Agency Parcel

A regulatory determination that the Successor Agency parcel is suitable for housing or public park use has not been made. In fact, the DEIR fails to identify the status of the cleanup on the Successor Agency parcel, stating only: **63**

> DTSC stated that they could not concur with the NFA [no further action] if concentrations remain above residential levels without a deed restriction (DEIR, p. 304).

On the basis of the supporting information in the DEIR, a deed restriction has not been prepared and submitted for agency review at the Successor Agency parcel. The DTSC's Envirostor website shows no listings for a deed restriction and the only entries at the website date from 2008. The information at the Envirostor website indicates the regulatory status of the Successor Agency parcel is open.[15] **64**

Contaminants that remain in soil at the Successor Agency parcel in excess of residential-scenario cleanup goals include petroleum hydrocarbons (TPH-d, TPH-mo), arsenic, cadmium, and lead.[16] The cleanup activities that were conducted in 2008 were not completed because soil excavation could not proceed under adjacent buildings, railroad tracks, and sidewalks (DEIR, p. 301). **65**

---

[13] CDM Smith, *2012 Update – Geotechnical Results and Conceptual Geotechnical Engineering Recommendations,* pp. 4, 6, and Figure 1 (Nov. 7, 2012).
[14] *RAP*, pp. 2-13, 2-28, 2-29, 4-9.
[15] http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60000833
[16] Remedial Action Completion Report, UPRR Parcel D, Erler & Kalinowski, January 30, 2009.

Contaminants, including volatile organic compounds (VOCs), may also be present beneath the Successor Agency parcel in soil vapor (DEIR, p. 316). These contaminants, which may have originated from the Sherwin Williams parcel, include benzene, a known human carcinogen.[17] Workers may be exposed to vapors during earthwork activities and put at risk to health effects which include, in addition to cancer, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness.[18] Future residents may be subject to similar health effects if the source of the benzene in soil vapor (i.e., benzene-contaminated soil and groundwater), is not addressed through remediation.

The DEIR states that vapor intrusion at the Successor Agency parcel may pose a potential significant hazard for future site occupants if residential development proceeds on the Successor Agency parcel under Option A, which includes residential housing (DEIR, p. 316). To address this potential, the DEIR includes Mitigation Measure HAZ-2b which requires, as a condition of approval for construction permits for residential housing on the Successor Agency parcel, an evaluation of soil gas conditions and indoor air quality for DTSC approval. **66**

The reliance on a future evaluation of vapor intrusion is inadequate and constitutes deferred mitigation. Instead, as with the Sherwin Williams parcel, studies of vapor intrusion and soil contamination at the Successor Agency parcel should be conducted for inclusion in a revised DEIR. A clear delineation of areas where soil contamination remains above residential cleanup goals should also be included in a revised DEIR. Only with proper disclosure of contamination conditions can the potential impacts on human health of future residents and construction workers be understood. **67**

The DEIR states that vapor intrusion at the Successor Agency parcel may pose a potential significant hazard for future site occupants if residential development proceeds on the Successor Agency parcel under Option A, which includes residential housing (DEIR p. 316). To address this potential, the DEIR includes Mitigation Measure HAZ-2b, which requires an evaluation of soil gas conditions and indoor air quality approval from DTSC before construction permits are issued for residential housing on the Successor Agency parcel. **68**

This mitigation is inadequate for three reasons. First, reliance on a future evaluation of vapor intrusion is inadequate and constitutes deferred mitigation.

Second, before the City approves the Project it must investigate and disclose the extent of contamination that remains on the Successor Agency parcel, and must ensure that proper mitigation measures are in place to protect not only future residents, but also construction workers and residents who live across the street from the Project site. As with the Sherwin Williams parcel, studies of vapor intrusion and soil contamination at the Successor Agency parcel should be conducted for inclusion in a revised DEIR." A clear delineation of areas where soil contamination remains above residential cleanup goals should also be included in a revised DEIR. Only with proper disclosure of contamination conditions can the potential impacts on human health of residents and construction workers be understood. **69**

[17] http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/2983764469/LUC%20Final_executed_recorded.pdf, p. 5.
[18] http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=38&tid=14

Third, it is not enough to require a soil vapor investigation only if residential housing is constructed on the parcel under Project Option A, but not if a public park is constructed under Project Option B. Recreational users of the public park, including children and Project residents, must be protected from unhealthy levels of exposure to contaminated soil. 70

A revised DEIR must be prepared to include adequate mitigation, to include a vapor intrusion investigation that has been reviewed and approved by DTSC.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The DEIR for the Project relies on emissions calculated from the California Emissions Estimator Model Version CalEEMod.2013.2.2 ("CalEEMod").[19] CalEEMod provides recommended default values based on site specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but CEQA requires that such changes be justified by substantial evidence.[20] Once all the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files, which can be found in Appendix C of DEIR, disclose to the reader what parameters were utilized in calculating the Project's air pollution emissions, and make known which default values were changed as well as provide a justification for the values selected.[21] 71

When reviewing the Project's CalEEMod output files, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR and the Transportation Impact Analysis (Appendix B). As a result, emissions associated with the construction of the Project are underestimated. A revised DEIR should be prepared to adequately assess the potential impacts that construction of the Project may have on regional and local air quality using appropriate input parameters.

Incorrect Land Use Types and Sizes

The “Land Uses” inputted into the CalEEMod model are not consistent with the proposed land uses disclosed in the DEIR. According to Table III-2 of the DEIR, the Project proposes to construct 540 residential dwelling units, 94,600 square feet of commercial space, 138,957 square feet of park land and open space, 48,352 square feet of roads, 16 to 30 street parking spaces, and up to 982 garage parking spaces (see excerpt below) (p. 46).[22] 72

[19] CalEEMod website, *available at*: http://www.caleemod.com/
[20] CalEEMod User Guide, pp. 2, 9, *available at:* http://www.caleemod.com/
[21] CalEEMod User Guide, pp. 7, 13, *available at:* http://www.caleemod.com/ (A key feature of the CalEEMod program is the “remarks” feature, where the user explains why a default setting was replaced by a “user defined” value. These remarks are included in the report.)
[22] DEIR Figures III-6 and III-7 indicate 23 street parking spaces, whereas Table III-2 indicates 16 street parking spaces.

Table III-2: Project Development Scenarios Summary

	Development Scenarios	
	Option A	**Option B**
Parcel A (Existing Buildings 1 and 31)	Office: 74,000 SF Building Height: 42 FT	
Parcel B-1	Residential: 175 units Restaurant: 5,000 SF Retail/Residential Amenities: 7,000 SF Parking: 116 spaces Total: 213,250 SF Building Height: 75 FT (55 FT at Sherwin Avenue frontage)	
Parcel B-2	Residential: 53 units Ground Floor Office: 5,600 SF Parking: 489 spaces Building Height: 75 FT (55 FT at Horton Street frontage) Total: 66,550 SF	
Parcel C-1	Residential: 104 units Parking: 175 spaces Total: 119,600 SF Building Height: 75 FT (55 FT at Sherwin Avenue frontage)	Residential: 106 units Parking: 111 spaces Retail: 3,000 SF Total: 124,900 SF Building Height: 75 FT (55 FT at Sherwin Avenue frontage)
Parcel C-2	Residential: 128 units Parking: 103 spaces Retail: 3,000 SF Total: 150,200 SF Building Height: 75 FT	Residential: 126 units Parking: 114 spaces Total: 144,900 SF Building Height: 75 FT
Parcel D	Residential: 80 units Parking: 99 spaces Total: 92,000 SF Building Height: 100 FT	
Open Space	90,605 SF	
Roads	48,352 SF	
Successor Agency Park Parcel	63,422 SF Park located within interior of the site between Parcel C-1, Parcel C-2, Hubbard Circle West, and Sherwin Avenue	63,422 SF Park located at southwestern corner of the site, immediately adjacent to the railroad tracks (west), Parcel C-1 (east), and Sherwin Avenue (south)
Total Development	**540 Dwelling Units (621,000 SF)** **94,600 SF Commercial** **16 street parking spaces**	
	982 garage parking spaces	**929 garage parking spaces**

SF = square feet; FT = feet

Source: ROMA Design Group, November 2014.

72 cont.

When comparing the "Land Uses" inputted into the CalEEMod model to the land uses disclosed in the DEIR, we found that the CalEEMod model completely omitted construction of the proposed roads, street parking, and park space (see excerpt below) (Appendix C, pp. 4).

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	79.60	1000sqft	1.83	79,600.00	0
Unenclosed Parking with Elevator	982.00	Space	0.00	392,800.00	0
High Turnover (Sit Down Restaurant)	5.00	1000sqft	0.11	5,000.00	0
Apartments Mid Rise	540.00	Dwelling Unit	8.00	540,000.00	1544
Strip Mall	10.00	1000sqft	0.23	10,000.00	0

This inconsistency in the proposed "Land Uses" presents a significant issue. First, paving for the parking spaces and roads involves laying concrete or asphalt, which will result in air pollutant emissions during construction.[23] Furthermore, the park land use will consist of a large public park, a dog park, bike and

73

[23] CalEEMod User Guide, pp. 25, *available at:* http://www.caleemod.com/

pedestrian trail, adult fitness area, children's playground, and sports courts (DEIR, Figure III-6). Construction of this proposed park space will generate additional air pollutant emissions. Therefore, by failing to include the street parking spaces, roads, and recreational land uses, the CalEEMod model greatly underestimates the Project's construction emissions. **73 cont.**

Furthermore, omission of the park land use from the CalEEMod model also results in an underestimation of the Project's operational emissions. The land uses, size features, and population are used throughout CalEEMod in determining default variables and conducting calculations. Each land use has an established trip rate critical for mobile source calculations.[24] People from the surrounding communities will make trips to the Project site in order to use the recreational features. Therefore, by failing to include "City Park" as a land use in the model, the number of trips generated during Project operation is greatly underestimated. **74**

Using the weekday, Saturday, and Sunday trip rates from the ITE *9th Edition Trip Generation Manual*, the total number of traffic trips associated with use of the Project site would increase when the "City Park" land use is added.

Furthermore, the CalEEMod model allocates only 540,000 square feet for the Apartments Mid Rise land use type. However, Table III-2 of the DEIR specifically states that the 540 dwelling units will take up approximately 621,000 square feet of building space (DEIR, p. 46). Land use square footage is important for determining the impacts from emissions generated by architectural coating activities and energy consumption.[25] Therefore, by underestimating the square footage, the Project's operational emissions are underestimated. **75**

Use of Incorrect Carbon Intensity Factor

The CalEEMod model also relied upon an incorrect carbon dioxide (CO_2) intensity factor to estimate the Project's operational greenhouse gas (GHG) emissions. CalEEMod assumes a default CO_2 intensity factor of 641.35 pounds per megawatt-hour (lb/MWhr). This intensity factor is used to estimate the CO_2 emissions generated from electricity usage during Project operation. The CO_2 intensity factor used in the CalEEMod model, however, was adjusted from this default value to 290 lb/MWhr (see excerpt below) (Appendix C, pp. 5).

tblProjectCharacteristics	CO2IntensityFactor	641.35	290

76

The CalEEMod output file attempts to justify this reduction by stating, "Per PG&E GHG Emissions April 2013" (Appendix C, p. 4). This justification, however, does not clearly state the source of the 290 lb/MWhr value or where to obtain the document that contains this value.

Regardless, we believe this value was taken from the *Greenhouse Gas Emissions Factors: Guidance for PG&E Customers*, which states that for the year 2020, the future emissions factor may be 290 lbs

[24] CalEEMod User's Guide, p. 15, 16, *available at:* http://www.caleemod.com/
[25] CalEEMod User's Tips, *available at:* http://www.caleemod.com/

CO_2/MWh.[26] When reviewing this document, however, we found that it specifically states that "The information in this document is not to be used for mandatory GHG reporting, financial analysis, or regulatory compliance, and does not necessarily reflect the approaches taken by PG&E for its own regulatory compliance purposes."[27] Therefore, reducing the CO_2 intensity factor to reflect the emissions that may be generated from electricity consumption in 2020 after buildout of the proposed Project in the CalEEMod model is inconsistent with the recommendations of this document, and should not be used to estimate the significance of the Project's GHG emissions under CEQA. **76 cont.**

Furthermore, the future emission factors provided within this document do not take into consideration the impact of the drought on hydroelectric power after 2010, and as a result, the actual CO_2 intensity factor for 2020 may be higher than what is provided. This is shown in the recently verified intensity factor for 2014, which was 435, higher than PG&E's previous estimated intensity factor of 412.[28] **77**

Additionally, the PG&E document states that "to estimate GHG emissions in a recent or future year for which an emission factor is not yet available, we recommend using an average of the five most recent coefficients available."[29] The PG&E Emissions Factor Summary estimates the five year average for CO_2 to be 457 lbs/MWh. Therefore, at the very least, an intensity factor of 457 lbs/MWh should have been applied to the Project, which is still much greater than the 290 lb/MWh intensity factor used within the CalEEMod model. As a result, the Project's GHG emissions are greatly underestimated. **78**

Omission of Materials Imported and Exported

The Transportation Impact Analysis states that during the grading phase, "it is expected that approximately 7,000 cubic yards of fill would be imported to the site" (p. 68). Moreover, the DEIR and its supporting geological reports indicate that a top layer of artificial fill ranging from 4 to 22 feet deep and containing organic debris, concrete, glass, and other materials, plus a second layer of clay ranging from 10 to 33 feet deep and containing abundant organic materials, are both unsuitable to support conventional building foundations.[30] These layers will occur beneath Building 35 and on other portions of the Project site, and they will likely need to be removed and replaced with compacted fill.[31] Finally, as described in the hazardous materials discussion above, it is more than likely that further remediation through soil excavation and replacement will be required in order to protect human health and safety on the Project site, due to the presence of contaminants of concern that exceed acceptable levels. **79**

---

[26] *Available at:* http://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf
[27] *Ibid.,* p. 1
[28] *Compare:* pgecurrents.com/, *with*: http://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf
[29] *Ibid.,* p. 2
[30] DEIR, p. 270, 278-279; CDM Smith, *2012 Update – Geotechnical Results and Conceptual Geotechnical Engineering Recommendations*, pp. 4, 6 (Nov. 7 2012); CDM, *Summary of Geotechnical Results and Conceptual Geotechnical Engineering Recommendations*, pp. 6, 8 (June 10, 2005).
[31] *Ibid.*

However, review of the CalEEMod output file shows that *no value* was inputted for materials imported or exported from the site. Using accurate values for material imported and exported is critical to properly estimate the correct number of hauling trips to and from the site during this construction phase.[32] 79 cont.

Failure to Include Hauling Trips

As previously stated, the Transportation Impact Analysis states that 7,000 cubic yards of fill will be imported. This will result in a total of 180 truck trips a day for a week of the grading phase (Appendix B, p. 69). This would equate to a total of 900 hauling truck trips for the entire grading phase of construction (180 truck trips/day x 5 working days/week), which should have been inputted in the CalEEMod model. The export of unsuitable buildings soils and contaminated soils from the Project site will substantially increase the number of haul trips required.

However when reviewing the CalEEMod output files, there are no hauling trips modeled for the grading phase or for any other phase of construction (see excerpt below) (Appendix C, p. 9). 80

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	585.00	138.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	117.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

By omitting the expected hauling trips that would be required for delivery of fill material, emissions from transportation of these hauling are completely unaccounted for in the model. As a result, the pollutant emissions estimated in the model are substantially underestimated as they do not account for a significant number of hauling trips by heavy duty vehicles that will occur during Project construction.

Incorrect Application of Pass-By Trips

The Project's Transportation Impact Analysis states, "Although some trips to the retail component could be pass-by trips, which are trips that make an interim stop on an already planned trip, route deviation from 40th Street or San Pablo Avenue would result in new traffic in the immediate vicinity of the project site. Therefore, no pass-by reduction was taken for this analysis" (Appendix B, p. 38). However, this is not reflected in the CalEEMod output files. Review of the CalEEMod output file demonstrates that contrary to the Transportation Impact Analysis, for all land use types except "Unenclosed Parking with Elevator", a percentage of operational trips were allocated to pass-by trips (see excerpt below)(Appendix C, pp. 22). 81

[32] CalEEMod User's Guide, p. 26, *available at:* http://www.caleemod.com/

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

81 cont.

Pass-by trips, which are a result of no diversion from the primary route, are assumed to have a length of only 0.1 miles in CalEEMod.[33] In contrast, based on measurements made within Google Earth, trips deviating from 40th Street or San Pablo Avenue would travel approximately one quarter mile to one half mile in each direction to reach the Project site entrance. Therefore, the operational emissions associated with the proposed Project are greatly underestimated.

Updated Analysis Indicates Significant Construction Emissions

82

In an effort to more accurately estimate the Project's emissions, we prepared an updated air model using the California Emissions Estimator Model Version CalEEMod.2013.2.2 ("CalEEMod").[34] CalEEMod provides recommended default values based on site specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but CEQA requires that such changes be justified by substantial evidence.[35] Once all the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files, which we have included as an attachment to this letter for reference, disclose to the reader what parameters were utilized in calculating the Project's air pollution emissions, and make known which default values were changed as well as provide a justification for the values selected.[36]

We increased the square footage for the "Apartments Mid-Rise" land use, and included "Parking Lot", "City Park", and “Other Asphalt Surfaces" land use types in the updated CalEEMod to reflect information provided in Table III-2 of the DEIR (p. 46). These land use changes can be seen in the table below.

[33] CalEEMod User’s Guide, p. 28, *available at:* http://www.caleemod.com/
[34] CalEEMod website, *available at*: http://www.caleemod.com/
[35] CalEEMod User Guide, pp. 2, 9, *available at:* http://www.caleemod.com/
[36] CalEEMod User Guide, pp. 7, 13, *available at:* http://www.caleemod.com/ (A key feature of the CalEEMod program is the “remarks” feature, where the user explains why a default setting was replaced by a “user defined” value. These remarks are included in the report.)

Parameter	DEIR CalEEMod Inputs		SWAPE CalEEMod Inputs	
Strip Mall	10,000	SF	10,000	SF
High Turnover (Sit Down Restaurant)	5,000	SF	5,000	SF
General Office Building	79,600	SF	79,600	SF
Unenclosed Parking w/ Elevator	982	Spaces	982	Spaces
Apartments Mid Rise	540	DU	540	DU
	540,000	SF	621,000	SF
Parking Lot	-	-	16	Spaces
City Park	-	-	1.46	Acre
Other Asphalt Surfaces (Roads)	-	-	48,352	SF

Furthermore, we relied on the default CO_2 intensity factor (641.35 lb/MWhr). We conservatively inputted 7,000 cubic yards of material for import and a total of 900 hauling truck trips for the grading phase. Additionally, the pass-by trip percentages from the DEIR CalEEMod Model were allocated to primary trips (see table below).

For parks and open space on the site, we calculated emissions associated only with the 1.46-acre City Park, although this revised calculation should include the full 3.54-acres of parks and open space on the Project site. When the corrected input parameters listed above are used to model emissions, we find that the Project's construction-related criteria air pollutant emissions increase significantly compared to the DEIR's model. Furthermore, we find that the Project's construction-related ROG emissions exceed the average daily threshold of 54 pounds per day set forth by the Bay Area Air Quality Management District (BAAQMD) (see table below).[37]

82 cont.

Project Construction Emissions (lbs/day)				
	ROG	**NOx**	**Exhaust PM10**	**Exhaust PM2.5**
DEIR Model	32.00	18.20	0.90	0.80
SWAPE Model	62.84	32.83	1.55	1.45
BAAQMD Threshold	**54**	**54**	**82**	**54**
Exceed Threshold?	***Yes***	***No***	***No***	***No***

As demonstrated in the table above, when correct modeling parameters are used, the Project's criteria air pollutant emissions increase greatly and construction-related ROG emissions exceed the established threshold of 54 lbs/day. Due to these reasons, a DEIR should be prepared that includes an updated model to adequately estimate the Project's emissions during construction.

[37] "BAAQMD Air Quality Guidelines." Bay Area Air Quality Management District, p. 2-2, *available at*: http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines%20May%202011.ashx?la=en

Letter
B4
Attach A

Sincerely,

Matt Hagemann, P.G., C.Hg.

Jessie Jaeger

82 cont.

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

1640 5th St.., Suite 204 Santa
Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

83 cont.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

83 cont.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

83 cont.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

83 cont.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

83 cont.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

83 cont.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

83 cont.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

83
cont.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

Letter
B4
Attach A

JESSIE MARIE JAEGER

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Mobile: (530) 867-6202
Office: (310) 452-5555
Fax: (310) 452-5550
Email: jessie@swape.com

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES **B.S. CONSERVATION BIOLOGY & ENVIRONMENTAL SCIENCES** *JUNE 2014*

PROJECT EXPERIENCE

SOIL WATER AIR PROTECTION ENTERPRISE ***SANTA MONICA, CA***

AIR QUALITY SPECIALIST

SENIOR ANALYST: CEQA ANALYSIS & MODELING

- Calculated roadway, stationary source, and cumulative impacts for risk and hazard analyses at proposed land use projects.
- Quantified criteria air pollutant and greenhouse gas emissions released during construction and operational activities of proposed land use projects using CalEEMod and EMFAC2011 emission factors.
- Utilized AERSCREEN, a screening dispersion model, to determine the ambient air concentrations at sensitive receptor locations.
- Organized presentations containing figures and tables comparing results of particulate matter analyses to CEQA thresholds.
- Prepared reports that discuss results of the health risk analyses conducted for several land use redevelopment projects.

SENIOR ANALYST: GREENHOUSE GAS MODELING AND DETERMINATION OF SIGNIFICANCE

83 cont.

- Quantified greenhouse gas (GHG) emissions of a "business as usual" scenario for proposed land use projects using CalEEMod.
- Determined compliance of proposed projects with AB 32 GHG reduction targets, with measures described in CARB's Scoping Plan for each land use sector, and with GHG significance thresholds recommended by various Air Quality Management Districts in California.
- Produced tables and figures that compare the results of the GHG analyses to applicable CEQA thresholds and reduction targets.

PROJECT MANAGER: OFF-GASSING OF FORMALDEHYDE FROM FLOORING PRODUCTS

- Determined the appropriate standard test methods to effectively measure formaldehyde emissions from flooring products.
- Compiled and analyzed laboratory testing data. Produced tables, charts, and graphs to exhibit emission levels.
- Compared finalized testing data to Proposition 65 No Significant Risk Level (NSRL) and to CARB's Phase 2 Standard.
- Prepared a final analytical report and organized supporting data for use as Expert testimony in environmental litigation.
- Participated in meetings with clients to discuss project strategy and identify solutions to achieve short and long term goals.

PROJECT ANALYST: EXPOSURE ASSESSMENT OF CONTAMINANTS EMITTED BY INCINERATOR

- Reviewed and organized sampling data, and determined the maximum levels of arsenic, dioxin, and lead in soil samples.
- Determined cumulative and hourly particulate deposition of incinerator and modeled particle dispersion locations using GIS and AERMOD.
- Conducted risk assessment using guidance set forth by the Office of Environmental Health Hazard Assessment (OEHHA).
- Utilized LeadSpread8 to evaluate exposure, and the potential adverse health effects from exposure, to lead in the environment.
- Compared final results of assessment to the Environmental Protection Agency's (EPA) Regional Screening Levels (RSLs).

ACCOMPLISHMENTS

- **Recipient**, Bruins Advantage Scholarship, University of California, Los Angeles ***SEPT 2010 – JUNE 2014***
- **Academic Honoree,** Dean's List, University of California, Los Angeles ***SEPT 2013 – JUNE 2014***
- **Academic Wellness Director**, UCLA Undergraduate Students Associated Council ***SEPT 2013 – JUNE 2014***
- **Student Groups Support Committee Member**, UCLA Undergraduate Students Associated Council ***SEPT 2012 – JUNE 2013***

ATTACHMENT B

Letter B4
Attach. B

March 8, 2016

Ms. Ellen Wehr
Adams Broadwell Joseph & Cardozo
520 Capitol Mall, Suite 350
Sacramento, CA 95814

Subject: Sherwin Williams Development Project, Emeryville (SCH # 2004122083)

Dear Ms. Wehr:

Per your request, I have reviewed the Draft Environmental Impact Report (the "DEIR") for the Sherwin Williams Development Project (the "Project") in the City of Emeryville (hereinafter the "City"). My review is with respect to the transportation and circulation component of the DEIR and includes consideration of Appendix B to the DEIR. My qualifications to perform this review include registration as a Civil and Traffic Engineer in California and over 47 years professional consulting engineering practice in the traffic and parking field. I have both prepared and reviewed the transportation and circulation sections of environmental review documents including mixed use developments. My professional resume is attached hereto. **84 cont.**

My technical comments on the DEIR follow:

Overview

There are two fundamental flaws with the DEIR Transportation and Circulation analysis that render the DEIR critically deficient:

1. The DEIR estimates motor vehicle trip generation using procedures self-developed by the DEIR transportation analysis firm that significantly understate trip totals, that have no measured relationship to mode choice at existing mixed-use developments in Emeryville and that errantly assume that the conventionally relied-upon trip generation rate reflects a

Letter B4
Attach. B

baseline condition of zero transit use, zero bike use, zero walk use and zero internalized trips.

2. Except where required to comply with the policies of other responsible agencies, the DEIR abandons conventional Level of Service (LOS) standards of significance for traffic impacts and instead bases the transportation and circulation analysis on
   a) vehicle miles traveled (VMT), a significance criterion that, at the time the DEIR transportation analysis was completed had yet to be adopted, was still subject to change, and for which no explicit computational procedures and significance thresholds had yet been defined, and
   b) amorphous Quality of Service (QOS) criteria for which thresholds of significance are only nominatively defined by the DEIR's transportation analysts themselves.

84 cont.

1. The DEIR Significantly Understates The Project's Potential Motor Vehicle Trip Generation

The DEIR evaluates the Project's transportation and circulation impacts as an urban mixed use development. Specifically, it assumes that 10 percent of Project trips will be internal to the Project's mix of uses, that 15 percent of the trips that leave the site will be by walking or bicycling, and that 15 percent of the peak hour and 10 percent of total weekday and weekend trips will be by public transit, with all of those percentages deducted from the baseline trip level established through the conventional Institute of Transportation Engineers *Trip Generation* rates.

85

It is uncontested that urban mixed-use developments tend to have lower motor vehicle trip generation rates than indicated by conventional ITE trip generation rates. However, the DEIR evaluates mode choice and motor vehicle trip generation for the Project under a spreadsheet procedure (MXD+) that is self-developed by the same transportation analysis firm that prepared the DEIR transportation and circulation analysis.

The results of the MXD+ procedure have no documented relationship to overall mode choice conditions in Emeryville as a whole or to mode choice conditions actually measured at existing mixed use developments in Emeryville. The procedure errantly presumes that motor vehicle trip generation rates from ITE's *Trip Generation,* the conventional data source in most EIRs and traffic analyses, reflect usage sites that have zero transit mode choice, zero walk mode choice, zero bike mode choice and zero internalized trips as a baseline condition.

86

Letter B4
Attach. B

Moreover, the DEIR evaluates this Project based on assumptions about the surrounding area that have the result of minimizing the estimated motor vehicle trip generation, and overemphasizing internal trips and trips by walking, bicycle and transit. Those assumptions are inconsistent with the actual character of the Project and its environs. Hence, the DEIR fails to comply with the good faith effort to disclose impacts that the California Environmental Quality Act (CEQA) demands. The following paragraphs highlight those inconsistencies that cause the DEIR to understate the Project's motor vehicle traffic generation. **87**

1. <u>The MXD+ Model results are inconsistent with available Emeryville mode choice data.</u>

As noted above, based on the MXD+ model, the DEIR assumes that 10 percent of Project trips will be internal to the Project's mix of uses, that 15 percent of the trips that leave the site will be by walking or bicycling and that 15 percent of the peak hour and 10 percent of the total weekday and weekend trips will be by public transit, with all of those percentages deducted from a baseline trip level established through the Institute of Transportation Engineers *Trip Generation* rates. That leaves an estimate of only 65 percent of daily and weekend trips and 60 percent of peak hour trips taken by auto (including drive-alone and carpool trips).

The most recent mode choice survey for Emeryville is the U.S. Census Bureau's American Communities Survey data collected in Emeryville in 2014. For persons employed in Emeryville, the U.S. Census Bureau 2014 commute mode choice data are sharply at odds with the MXD+ results. For persons holding jobs in Emeryville, the observed journey-to-work data is as follows: 70.35 percent drove alone, 10.75 percent carpooled (combined motor vehicle share 81.1 percent), only 9.34 percent used transit, only 2.79 percent walked, 3.39 percent biked (combined walk/bike share 6.18 percent), 1.73 percent traveled by other means, and 1.65 percent telecommuted. This vast disparity in the motor vehicle share for job-holders (81.1 percent observed versus 60 percent per MXD+) casts doubt on the entire MXD+ analysis. **88**

City	Year	Mode	Share
Emeryville	2014	Drive Alone	0.704
Emeryville	2014	Carpool	0.107
Emeryville	2014	Public Transit	0.093
Emeryville	2014	Walk	0.028
Emeryville	2014	Bike	0.034
Emeryville	2014	Other	0.017
Emeryville	2014	Telecommute	0.016

Letter B4
Attach. B

There is considerable mixed use development existing in Emeryville. If the analysts wanted to calibrate and validate the MXD+ spreadsheet for Emeryville, they could have and should have observed actual mode choice and trip generation at mixed use developments in Emeryville rather than relying from data from other distant locations where the mixed use developments observed have very different contextural characteristics (transit network, bicycle and pedestrian facilities, traffic and parking conditions, etc.) from this site in this Emeryville setting. **88 cont.**

We note here that the "*Usage Statement And Disclaimer"* embedded in the MXD+ spreadsheet includes the following statement:

> "*While the research underlying the spreadsheet has been reviewed for general usefulness, it is the responsibility of the user to assess whether the research is relevant to and credible for his/her intended application. It is also the users responsibility to exercise professional judgment on appropriateness of the specific details of their subject case. <u>In cases where this is in doubt, the user is advised to either apply alternate methods or to validate the MXD+ method with respect to local data and to test the method's sensitivities to the particular combination of factors under study</u>."* (emphasis added)

89

It appears that the analysts who prepared the subject DEIR transportation and circulation analysis ignored their own model's disclaimer and recommendation to validate the model with local data.

2. <u>The Usage Statement And Disclaimer and the Instructions embedded in the MXD+ spreadsheet contain other disquieting statements that make applicability of the MXD+ results questionable.</u>

   "<u>*We*</u> [Fehr & Peers] <u>*make no representation or warranty concerning*</u> *the tool's use by inexperienced individuals,* <u>*nor concerning the tool's functionality nor accuracy beyond the scope of the underlying research*</u>." (emphasis added)

90

This essentially says that the traffic consultant does not represent or warranty the accuracy of MXD+ other than to replicate anything but the data used to develop it. This is in stark contrast to the claim in the DEIR that the MXD+ model has been *"approved for use by the US EPA"* (see DEIR page 119 and footnote 8). The EPA public relations release cited in footnote 8 merely states that the subject model has been validated against the data used to create it.

Letter B4
Attach. B

One of the two peer reviews cited in the same DEIR paragraph (footnote 9) is by the same academic researcher who developed the data relied upon to develop the model, hardly an unbiased reviewer, and who is also referenced in DEIR footnote 6 to the subject chapter. **91**

The second 'peer review' is a comparative evaluation of the applicability of the new MDX+ model with 4 similar models for use in California that are referenced in footnote 10 of the DEIR transportation and circulation section. The evaluation only assesses the strengths and drawbacks of each of the 5 options; it does not designate MXD+ or any of the others as a preferred option or "*clear winner*". The evaluation also states that its conclusions are uncertain:

> *"These initial results also point to the critical need for further collection of trip generation data at smart growth sites. Based on only 22 sites, the evaluation presented here is not adequate to fully assess the performance of available methods. In addition, the validation sites do not reflect the full spectrum of smart growth development projects but instead cluster around two extremes – large multi-use suburban sites, and individual urban infill projects. Data from more sites of more types are needed to better understand the performance of the available methods."* **92**

The subject peer review also notes that the relative performance of the MXD+ model is "*not surprising, given that the multi-use sites were selected to resemble the multi-use sites used in calibrating"* the MXD+ method. In essence, this peer review is not so glowing in acclaim for MXD+ as the misleading DEIR narrative on DEIR page 119 purports.

Other statements in the MXD+ embedded Usage Statement And Disclaimer include:

- *"The accuracies of the model's predictions of travel by transit, walking and bicycling modes have not been mathematically validated ...".*

- *"The accuracies of proportions of daily travel occurring in specific times of day has not been fully validated."* **93**

- "The spreadsheet instructions further indicate that: *"The am and pm peak hour results are not based on a validated peak hour model. The site trip reduction data was only captured on a daily basis, and thus the 'predicted probabilities' (internal capture, walk and transit) are the same in peak hours as for daily for a given trip purpose. The overall trip reduction percentage will differ in the*

Letter B4 Attach. B

peak hours only to the extent that the trip purpose distribution differs." Obviously, trip purpose during the am and pm peak hours differs substantially from other times of the day.

- The MXD+ instructions also indicate that *"the site ought to be within the range of the data used to develop the model, namely: 1. The site should be between 5 and 2000 acres, and 2. There should be less than 2000 dwelling units and less than 3 million square feet of commercial use."* This site, with only 10.05 acres, 540 dwelling units (on development parcels that will occupy only 5.4 acres), and 94,600 square feet of commercial uses barely squeaks above the extremely lower limit of the range where the preparers claim the MXD+ model is applicable. **93 cont.**

In other words, the DEIR's predictions of transit, walking and bicycling and peak period travel and applicable to this project based on MDX+ are unreliable, according to its own preparers.

3. <u>The DEIR's assumption that ITE *Trip Generation's* projections of motor vehicle traffic reflect zero percentages of trips by walk, bike, transit and zero internalization is incorrect.</u>

Using the MXD+ analysis of motor vehicle trip generation, the DEIR assumes that its unreliable predictions of trips by transit, walk, bike and internalization are wholly deductable from ITE *Trip Generation* motor vehicle trip rates. It is true that ITE *Trip Generation* data tends to have been collected at suburban sites where it is far easier to focus on a homogenous use (that is, to focus on the motor vehicle trip generation characteristics of the primary use being studied) and where it is easier to count the motor vehicle traffic that comes and goes to and from the site (the motor vehicle trip generation) than would be the case in dense urban and large center city locations or in integral developments of substantially mixed-use compositions. **94**

However, it is simply wrong to presume that the ITE *Trip Generation* data on motor vehicle trips at residential developments or office developments reflects a "zero" baseline of transit, walking and bicycle trips and zero internalized trips. The trip generation studies, interested almost totally in motor vehicle traffic, simply did not count those other modes, though doubtless those trips were present. Many suburban locations of the types where ITE *Trip Generation* data was collected, particularly for the 8th and 9th editions, have robust transit and bike/pedestrian usage and have some degree of mixed-use internalization (rare is the modern office or business park of any substantial scale that does not have some level of convenience shop and restaurant uses that create some degree of internalization).

Letter B4
Attach. B

In my professional opinion it is completely wrong for the MXD+ model to deduct the totality of its unreliable predictions of transit, walk, bike and internalization from the ITE motor vehicle *Trip Generation* data that already reflects some portion of these totals. **94 cont.**

4. <u>The Project area is not a highly walkable, bike friendly setting.</u>

Contrary to the statement on DEIR page 118, the Project area is not a highly walkable or bike-friendly area. Perhaps the Emeryville General Plan describes it best:

> *"There are still a few locations in Emeryville with no sidewalks, where pedestrians must share the street with motor vehicles and bicyclists. In the industrial and commercial areas, large blocks, railroad and freeway corridors act as barriers to pedestrian travel. These barriers to pedestrian movement limit the viability of walking as a form of transportation."* (Emeryville General Plan, page 3-11)

> *"Emeryville's size and flat topography make it an ideal city for bicycling. Bicycles are a convenient means of transportation for short trips within the city. However, Emeryville has several barriers to safe and convenient bicycling. While most streets have low traffic volumes during most times of the day, 40th Street, Shellmound Street, San Pablo Avenue and portions of Christie Avenue and Powell Street have a large number of vehicle trips. These corridors serve regional retail destinations which are auto-oriented, and also serve vehicle traffic traveling through Emeryville."* (Emeryville General Plan, page 3-14)

95

For this Project one must consider the significant barriers in the vicinity of the Project site. Immediately west of the Project site are the Union Pacific railroad mainline tracks running north-south. Approximately 950 feet south of the project site is the 40th/Shellmound overcrossing of the railroad tracks. This high, curving, sterile, auto-oriented structure has 4 motor vehicle lanes flanked by Class-II bike lanes on both sides and an approximately 5-foot sidewalk on the northerly side only. The structure, nearly 1,000 feet long, forces bicyclists and pedestrians to climb to a height 30 feet above the railroad tracks. It is approached on either end through a sea of big-box retail stores and associated parking and is flanked on the south and west by heavily traveled elevated freeway ramps and main travel lanes. For bicyclists and pedestrians, this is a functional way to cross the railroad tracks at the extreme south end of Emeryville developments, but an uninviting and perhaps intimidating one. **96**

Letter B4
Attach. B

Approximately 2100 feet north of the Project site is the Powell Street overcrossing of the railroad tracks. This structure is totally motor vehicle oriented with no intentionally designed pedestrian or bicycle facilities. There are 2-foot wide striped shoulders and roughly 2-foot wide raised curbs on the structure that bicyclists and pedestrians might use at their peril although pedestrians are actually prohibited on the bridge by signage and discouraged from entering by features on the approaches.

Approximately 650 feet farther north from Powell (about 2,750 feet north of the Project site), there is a pedestrian bridge crossing the railroad tracks, constructed as a feature of the AMTRAK station. To use it, bicyclists or pedestrians must pass through a station parking lot, ascend to the crossing level (via stairs or elevator), descend on the other side and pass through another parking lot.

96 cont.

40th -Shellmound Overcrossing Looking West

Letter
B4
Attach. B

Aerial View, 40th - Shellmound Overcrossing

96 cont.

Powell Overcrossing: very narrow shoulders, pedestrians prohibited.

Letter B4
Attach. B

AMTRAK Station Overcrossing

Anti-pedestrian features abound in Emeryville. For example, at the intersection of Powell Street and Christie Avenue, near the Project site, pedestrians are prohibited from crossing the north and east legs of the intersection. The intersections of Powell Street with the Interstate 80 ramps and West Frontage Road are also daunting places for bicyclists and pedestrians, isolating the Watergate mixed-use complex west of I-80 from the rest of the City with regard to pedestrian and bike travel.

96 cont.

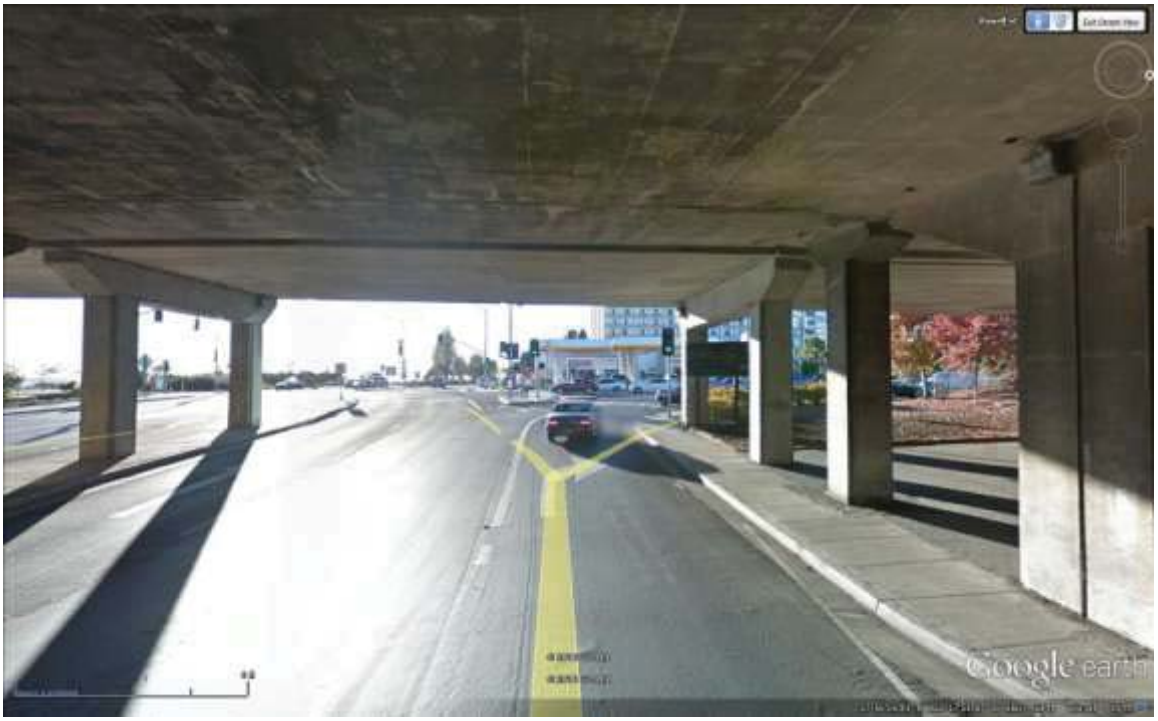
Letter
B4
Attach. B

Powell and Christie: Pedestrian crossings prohibited on north and east legs.

96 cont.

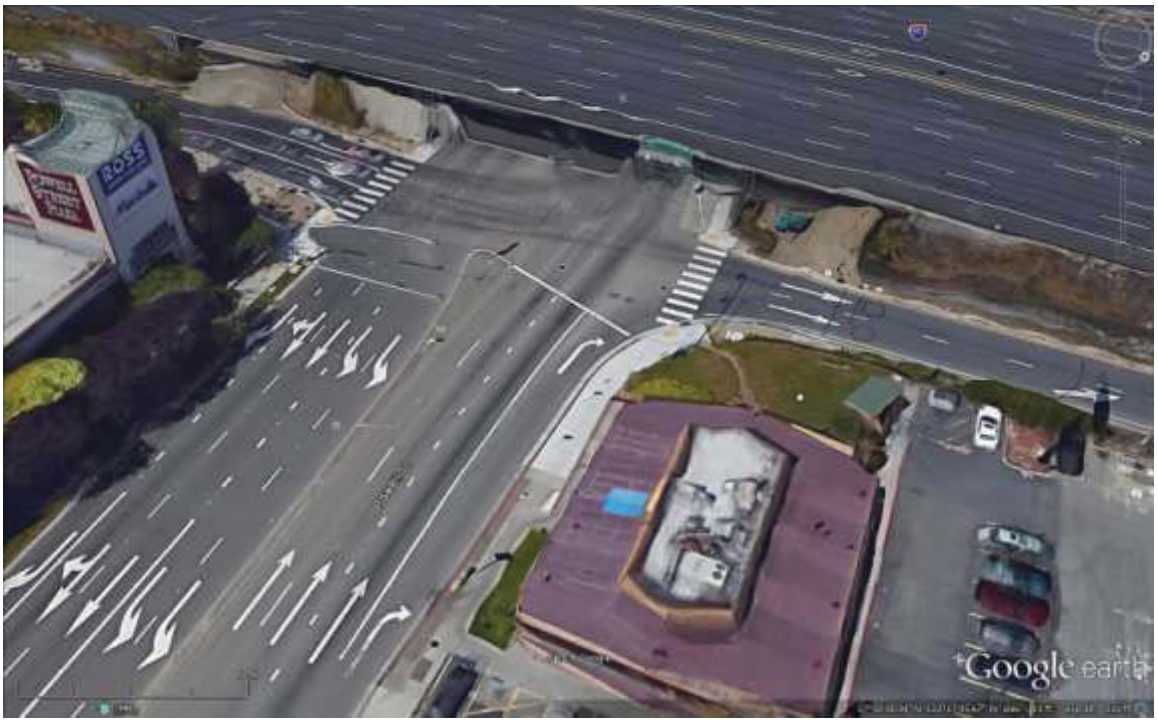
Powell at I-80 ramps and West Frontage Road.

Letter
B4
Attach. B



Powell, I-80 WB on ramp and West Frontage Road, looking west.

96 cont.



Powell and I-80 EB ramps.

Try bicycling through these intersections!

Letter B4
Attach. B

5. Emeryville has a fundamentally auto-dominant development structure.

The Emeryville General Plan observes as follows:

> *"Emeryville currently has an abundance of free parking for residents, visitors, and workers, making driving an attractive alternative to taking public transit, walking or bicycling. In the past, zoning requirements have prescribed parking requirements by land use type, but have not allowed for appropriate off-sets to account for shared parking, transit availability, or to promote bicycling and walking."* (Emeryville General Plan, page 3-18)

Epitomizing the auto-dominant development structure in Emeryville is the sequence of big box stores running parallel to 40th Street, some 3,500 feet from San Pablo Avenue to the Union Pacific tracks, including Pak N Save, Pacific Sales, Office Max, Sports Authority, Home Depot, Pet Club, Office Depot, Best Buy, Michaels, Toys R Us/Babies R Us and Target. This mass of retail commercial use is fronted by approximately 20 acres of surface parking. Across the tracks on Shellmound, the IKEA store features a 4-story parking structure containing about 1,100 parking spaces plus nearly 5 acres of surface parking. Parking abounds elsewhere. In the Emeryville Peninsula (Watergate) mixed-use complex, the office towers are served by large parking garages providing a total of over 2,000 spaces and the low-rise commercial use is served by large fields of surface parking. **97**

The Project sponsors obviously do not believe the proposed mixed-use development will minimize auto reliance and emphasize transit, walking, bicycling and internalization instead of external travel, nor do they intend to reinforce those attributes at the potential expense of reducing the marketability of the development through a minimized parking provision. The proposed parking for the project is 982 spaces for option A and 929 spaces for option B. The minimum spaces required under the City Code is 598 spaces, and the maximum allowed is 983 spaces (see DEIR page 184). The developer proposes to provide parking at or exceeding the maximum level allowed under Section 9-4.406 of the City's Planning Regulations.

6. Conclusion Regarding Understatement of the Project's Trip Generation

Based on all of the foregoing, it is obvious that the DEIR's computation of the Project's motor vehicle trip generation is seriously understated. Since findings of environmental impacts directly flow from the estimated trip generation, it is clear that the Project's impacts and mitigation needs are not fully disclosed. Hence, the DEIR Transportation and circulation analysis is inadequate. **98**

Letter B4
Attach. B

2. **The DEIR Bases Measurement of Transportation and Circulation Impacts on Questionable Criteria**

The DEIR bases its principal standard of motor vehicle traffic impact on vehicle miles of travel (VMT) criteria that are in the process of being developed by the California Governor's Office of Planning and Research (OPR), the state office that oversees administration of the CEQA process and guidelines. As admitted on DEIR pages 87, 121 and 122, guidelines with respect to the use of VMT as a motor vehicle traffic impact criterion had not yet been adopted as of the date of completion of the DEIR transportation and circulation analysis. They were still subject to change, and procedures for standardizing computation of this measure and defining significance thresholds have not been defined. **99**

Hence, the DEIR's reliance on this measure is a speculative adventure, and its use, without maintaining an assessment of impacts through intersection level "LOS" procedures and thresholds that have heretofore been the conventional measure of motor vehicle impacts in most jurisdictions, is inconsistent with the good faith effort to disclose impacts that CEQA demands. Per DEIR page 88, the analysis merely regards LOS as "*information and a 'proxy' for evaluating the transportation experience for vehicles, transit and bicyclists and to guide the development of the transportation system in the project vicinity*". Curiously, the bulk of material in the DEIR's Transportation and Circulation section is devoted to intersection LOS evaluations, an odd circumstance given that this material is merely 'information and a proxy'.

Regarding this matter, we note that because the DEIR's estimate of motor vehicle trip generation is understated, the DEIR's assessments of impacts using the VMT criteria are also understated and unreliable. Also, had the DEIR employed the conventional method of using intersection LOS analysis as an transportation impact criterion, even with its understated trip generation, the LOS computations it presents as 'information' would disclose significant Project traffic impacts at the intersections of Powell Street/Frontage Road in the Near Term + Project condition in the pm peak (both project options), at Powell Street/Christie Avenue in the Near Term + Project condition in the Saturday peak (both Project options), at Powell Street/Christie Avenue in the Cumulative + Project condition in the Saturday peak (both Project options), and at Hollis Street/45th Street in the Cumulative + Project condition in the weekday pm peaks. **100**

The DEIR also evaluates transportation and circulation impacts relative to amorphous Quality of Service (QOS) criteria for which thresholds of significance are nominated by the DEIR's transportation analysts themselves. To its credit, the DEIR does disclose some Project impacts relative to QOS criteria, such as adding excessive traffic to designated bicycle boulevards, causing traffic to exceed traffic signal warrants at unsignalized intersections, causing queues in **101**

Letter B4
Attach. B

excess of queue storage capacity at intersections, or causing excessive delay on routes heavily traveled by transit. However, the QOS analysis misses critical impact analysis considerations, such as whether the Project's transit riders would overload or add to overloads on key transit routes or services. Since the Bay Area Rapid Transit is critically overloaded in the am and pm commute peak periods, and just last week announced a program to discourage patrons from riding during the commute peaks, any Project contribution to BART commute peak ridership should be disclosed as a significant impact.[1] **101 cont.**

Conclusion

Based on all of the above comments, the DEIR transportation and circulation section is flawed and inadequate, should be completely redone and must be recirculated in draft status. Transportation-related mitigation measures, including clear and stringent transportation demand management requirements, should be included. **102**

Sincerely,

Smith Engineering & Management
A California Corporation

103

Daniel T. Smith Jr., P.E.
President

[1] San Francisco Chronicle, *BART riders get perks? There's a catch* (Mar. 3, 2016), *available at*: http://www.sfchronicle.com/bayarea/article/BART-testing-fun-incentives-program-for-6866860.php?t=52b2a719d90a4808f6&cmpid=twitter-premium

Letter
B4
Attach. B

DANIEL T. SMITH, Jr.
President

EDUCATION

Bachelor of Science, Engineering and Applied Science, Yale University, 1967
Master of Science, Transportation Planning, University of California, Berkeley, 1968

PROFESSIONAL REGISTRATION

California No. 21913 (Civil) Nevada No. 7969 (Civil) Washington No. 29337 (Civil)
California No. 938 (Traffic) Arizona No. 22131 (Civil)

PROFESSIONAL EXPERIENCE

Smith Engineering & Management, 1993 to present. President.
DKS Associates, 1979 to 1993. Founder, Vice President, Principal Transportation Engineer.
De Leuw, Cather & Company, 1968 to 1979. Senior Transportation Planner.
Personal specialties and project experience include:

103 cont.

Litigation Consulting. Provides consultation, investigations and expert witness testimony in highway design, transit design and traffic engineering matters including condemnations involving transportation access issues; traffic accidents involving highway design or traffic engineering factors; land use and development matters involving access and transportation impacts; parking and other traffic and transportation matters.

Urban Corridor Studies/Alternatives Analysis. Principal-in-charge for State Route (SR) 102 Feasibility Study, a 35-mile freeway alignment study north of Sacramento. Consultant on I-280 Interstate Transfer Concept Program, San Francisco, an AA/EIS for completion of I-280, demolition of Embarcadero freeway, substitute light rail and commuter rail projects. Principal-in-charge, SR 238 corridor freeway/expressway design/environmental study, Hayward (Calif.) Project manager, Sacramento Northeast Area multi-modal transportation corridor study. Transportation planner for I-80N West Terminal Study, and Harbor Drive Traffic Study, Portland, Oregon. Project manager for design of surface segment of Woodward Corridor LRT, Detroit, Michigan. Directed staff on I-80 National Strategic Corridor Study (Sacramento-San Francisco), US 101-Sonoma freeway operations study, SR 92 freeway operations study, I-880 freeway operations study, SR 152 alignment studies, Sacramento RTD light rail systems study, Tasman Corridor LRT AA/EIS, Fremont-Warm Springs BART extension plan/EIR, SRs 70/99 freeway alternatives study, and Richmond Parkway (SR 93) design study.

Area Transportation Plans. Principal-in charge for transportation element of City of Los Angeles General Plan Framework, shaping nations largest city two decades into 21'st century. Project manager for the transportation element of 300-acre Mission Bay development in downtown San Francisco. Mission Bay involves 7 million gsf office/commercial space, 8,500 dwelling units, and community facilities. Transportation features include relocation of commuter rail station; extension of MUNI-Metro LRT; a multi-modal terminal for LRT, commuter rail and local bus; removal of a quarter mile elevated freeway; replacement by new ramps and a boulevard; an internal roadway network overcoming constraints imposed by an internal tidal basin; freeway structures and rail facilities; and concept plans for 20,000 structured parking spaces. Principal-in-charge for circulation plan to accommodate 9 million gsf of office/commercial growth in downtown Bellevue (Wash.). Principal-in-charge for 64 acre, 2 million gsf multi-use complex for FMC adjacent to San Jose International Airport. Project manager for transportation element of Sacramento Capitol Area Plan for the state governmental complex, and for Downtown Sacramento Redevelopment Plan. Project manager for Napa (Calif.) General Plan Circulation Element and Downtown Riverfront Redevelopment Plan, on parking program for downtown Walnut Creek, on downtown transportation plan for San Mateo and redevelopment plan for downtown Mountain View (Calif.), for traffic circulation and safety plans for California cities of Davis, Pleasant Hill and Hayward, and for Salem, Oregon.

5311 Lowry Road, Union City, CA 94587 tel: 510.489.9477 fax: 510.489.9478

Transportation Centers. Project manager for Daly City Intermodal Study which developed a $7 million surface bus terminal, traffic access, parking and pedestrian circulation improvements at the Daly City BART station plus development of functional plans for a new BART station at Colma. Project manager for design of multi-modal terminal (commuter rail, light rail, bus) at Mission Bay, San Francisco. In Santa Clarita Long Range Transit Development Program, responsible for plan to relocate system's existing timed-transfer hub and development of three satellite transfer hubs. Performed airport ground transportation system evaluations for San Francisco International, Oakland International, Sea-Tac International, Oakland International, Los Angeles International, and San Diego Lindberg.

Campus Transportation. Campus transportation planning assignments for UC Davis, UC Berkeley, UC Santa Cruz and UC San Francisco Medical Center campuses; San Francisco State University; University of San Francisco; and the University of Alaska and others. Also developed master plans for institutional campuses including medical centers, headquarters complexes and research & development facilities.

Special Event Facilities. Evaluations and design studies for football/baseball stadiums, indoor sports arenas, horse and motor racing facilities, theme parks, fairgrounds and convention centers, ski complexes and destination resorts throughout western United States.

Parking. Parking programs and facilities for large area plans and individual sites including downtowns, special event facilities, university and institutional campuses and other large site developments; numerous parking feasibility and operations studies for parking structures and surface facilities; also, resident preferential parking .

Transportation System Management & Traffic Restraint. Project manager on FHWA program to develop techniques and guidelines for neighborhood street traffic limitation. Project manager for Berkeley, (Calif.), Neighborhood Traffic Study, pioneered application of traffic restraint techniques in the U.S. Developed residential traffic plans for Menlo Park, Santa Monica, Santa Cruz, Mill Valley, Oakland, Palo Alto, Piedmont, San Mateo County, Pasadena, Santa Ana and others. Participated in development of photo/radar speed enforcement device and experimented with speed humps. Co-author of Institute of Transportation Engineers reference publication on neighborhood traffic control.

103 cont.

Bicycle Facilities. Project manager to develop an FHWA manual for bicycle facility design and planning, on bikeway plans for Del Mar, (Calif.), the UC Davis and the City of Davis. Consultant to bikeway plans for Eugene, Oregon, Washington, D.C., Buffalo, New York, and Skokie, Illinois. Consultant to U.S. Bureau of Reclamation for development of hydraulically efficient, bicycle safe drainage inlets. Consultant on FHWA research on effective retrofits of undercrossing and overcrossing structures for bicyclists, pedestrians, and handicapped.

MEMBERSHIPS

Institute of Transportation Engineers Transportation Research Board

PUBLICATIONS AND AWARDS

Residential Street Design and Traffic Control, with W. Homburger *et al*. Prentice Hall, 1989.

Co-recipient, Progressive Architecture Citation, *Mission Bay Master Plan*, with I.M. Pei WRT Associated, 1984.

Residential Traffic Management, State of the Art Report, U.S. Department of Transportation, 1979.

Improving The Residential Street Environment, with Donald Appleyard et al., U.S. Department of Transportation, 1979.

Strategic Concepts in Residential Neighborhood Traffic Control, International Symposium on Traffic Control Systems, Berkeley, California, 1979.

Planning and Design of Bicycle Facilities: Pitfalls and New Directions, Transportation Research Board, Research Record 570, 1976.

Co-recipient, Progressive Architecture Award, *Livable Urban Streets, San Francisco Bay Area and London*, with Donald Appleyard, 1979.

COMMENTER B4

Emeryville Residents for Responsible Development
Ellen L. Wehr
March 8, 2016

Response B4-1: This comment, which introduces subsequent comments pertaining to the adequacy of the Draft EIR, is noted. As a preliminary response, although the comments in this letter raise questions about the analysis in the Draft EIR, the City's review of the Draft EIR in light of these comments has shown that the Draft EIR is adequate and does not suffer from any serious errors or emissions such that recirculation of the Draft EIR would be required pursuant to CEQA Guidelines Section 15088.5. See also Response B2-99.

Response B4-2: Responses to comments submitted by Matthew Hagemann and Jessie Jaeger are provided in Responses B4-54 through B4-83. Responses to comments submitted by Daniel Smith are provided in Responses B4-84 through B4-103.

Response B4-3: This comment describes the residential and work locations of Rudolph Brooks, Rances Rodriguez, the International Brotherhood of Electrical Workers Local 595, Plumbers & Steamfitters Local 342, the Sheet Metal Workers Local 104 and their connection to the impacts that would result from the proposed project. To the extent that there are such impacts, they are studied in the Draft EIR.

Response B4-4: This comment is introductory in nature and claims that the Draft EIR fails to adequately characterize and analyze air quality, greenhouse gas emissions, hazardous materials, traffic, and water supplies. The Draft EIR is adequate and does not suffer from any serious errors or emissions such that recirculation of the Draft EIR would be required pursuant to CEQA Guidelines Section 15088.5. Please see Responses B4-6 through B4-103 for responses to comments raised by the commenter. See also Response B2-99 that directly addresses CEQA Guidelines Section 15088.5.

Response B4-5: This comment describes the purpose of CEQA and standards that courts use in reviewing the adequacy of CEQA documents. The commenter also asserts that there are analysis deficiencies within the Draft EIR and the conclusions are "not supported by substantial evidence," but does not identify them specifically. Please see Responses B4-6 through B4-103 that respond to specific comments raised by the commenter.

Response B4-6: Comment is noted. The City and LSA agree that changes to default values should be provided in writing. As such, the project documentation in the form of the CalEEMod output in Appendix C of the Draft EIR indicates all

changes to the model default values that were made for purposes of this analysis.

Response B4-7: The commenter references a report prepared for the commenter by Matthew Hagemann and Jesse Jaeger (SWAPE) that is attached to the comment letter and identified as comments B4-54 through B4-83. The comment suggests that values that were input into the CalEEMod were not consistent with information disclosed in the EIR; however the comment does not go into detail regarding the inconsistencies or how emissions might be underestimated due to the inputs. The input values referenced in the comment were reviewed and Responses B4-54 through B4-83 provide a detailed response. Based on this subsequent review, the Draft EIR authors have determined that air quality impacts were adequately modeled and identified in the Draft EIR.

Response B4-8: The commenter is incorrect because the parks and open space components of the project were included as a function of the landscaping and roadways inputs which are incorporated into the residential land use code and project acreage entered in CalEEMod. The park parcel is 1.46 acres of the 10 acre site, which would not be considered a significant portion of the site (or generator of trips and emissions) and was included in the CalEEMod estimates under the residential land use area. See Responses B4-54 through B4-83 that confirm that emission estimates were identified for the construction of the project and indicate that when adding the park space and specifically identifying the other asphalt surfaces, construction emissions would remain well below the BAAQMD's significance criteria.

Response B4-9: The commenter is incorrect that CalEEMod "requires" the input of project acreage. Model input includes the total number of residential units and the total lot acreage. Total floor surface area was generated based on the number of units by CalEEMod. The architectural coating and energy use was accounted for by the total number of units. As shown in Table IV.D-5 and Table IV.D-6 of the Draft EIR, project construction and operational emissions would be well below the BAAQMD significance criteria. To address the concerns of the commenter, LSA conducted an additional analysis of the project to reflect the change in estimated emissions associated with adjusting the default square footage from 540,000 square feet (default) to 621,000 square feet. The revised tables are shown below. As shown in the tables, ROG emissions would be slightly higher than previously estimated, however emissions would remain well below the BAAQMD significance thresholds. Please note that revisions to Table IV.D-5 also include revisions associated with Response B4-80.

The Draft EIR Table IV.D-5 and Table IV.D-6 on pages 209 and 212 are modified as follows:

Table IV.D-5: Project Construction Emissions in Pounds Per Day

Project Construction	ROG	NO_x	Exhaust $PM_{2.5}$	Total $PM_{2.5}$	Exhaust PM_{10}	Total PM_{10}
Average Daily Emissions	~~32.0~~34.4	18.2	0.8	1.6	0.9	3.3
Average Daily Emissions from Park Construction, Roadway Construction and Soil Import	3.5	6.5	0.36	0.42	0.38	0.56
Total Construction Emissions	37.9	24.7	1.16	2.02	1.28	3.86
BAAQMD Thresholds	54.0	54.0	54.0	NA	82.0	NA
Exceed Threshold?	No	No	No	NA	No	NA

NA = Not Applicable, the BAAQMD does not have threshold

Source: LSA Associates, Inc., ~~2015~~2016.

Table IV.D-6: Project Regional Emissions

Emission Category	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO_x)	PM_{10}	$PM_{2.5}$
Emissions in Pounds Per Day				
Area Source Emissions	~~27.7~~ 29.7	0.5	0.8	0.8
Energy Source	0.2	1.9	0.1	0.1
Mobile Source Emissions	10.5	21.3	0.3	0.3
Total Emissions	**~~38.4~~ 40.1**	**23.7**	**1.3**	**1.2**
BAAQMD Significance Threshold	**54.0**	**54.0**	**82.0**	**54.0**
Exceed?	**No**	**No**	**No**	**No**
Emissions in Tons Per Year				
Area Source Emissions	~~4.8~~ 5.2	0.1	0.02	0.02
Energy Source	0.0	0.3	0.03	0.03
Mobile Source Emissions	1.6	3.4	2.68	0.75
Total Emissions	**~~6.4~~ 6.8**	**3.8**	**2.73**	**0.80**
BAAQMD Significance Threshold	**10.0**	**10.0**	**15.0**	**10.0**
Exceed?	**No**	**No**	**No**	**No**

Source: LSA Associates, Inc., ~~2015~~2016.

Response B4-10: The comment is noted regarding the approximately 7,000 cubic yards of soil that would be imported as part of the project.

Response B4-11: The commenter indicates that construction of the project would require further excavation and removal of materials on the site than was identified and evaluated in the Draft EIR leading to more truck trips than were identified. The estimate of truck trips was based on an estimate of the amount of material that would need to be removed for excavation and construction. No additional off-haul of materials/soil is expected at this time; however, should substantial soil off-haul be required, implementation of Mitigation Measure GEO-2 would require a final site-specific geotechnical plan to identify off-haul amounts. Additionally, as a condition of approval, the City would identify the number of off-haul trips estimated for the project in the Draft EIR, and should a greater number of trips be required than what was estimated due to on-site conditions, the City would require additional review. Therefore, no additional construction emission impacts would be expected.

Response B4-12: The 7,000 cubic yards of soil import was inadvertently omitted from the analysis. The analysis has been revised as shown in Response B4-9 and revised Table IV.D-5. Results indicate that the additional trips generated by the hauling of import soils would add minimal emissions to the expected average daily emissions. As shown in the revised Table IV.D-5, total construction emissions would still be well below the BAAQMD's significance criteria. This analysis is provided to clarify the analysis contained in the Draft EIR, and no new or more severe impacts were identified as a result of this analysis, and no new mitigation measures are required.

Response B4-13: See Response B4-11. Soil excavation is not planned for remediation purposes; however, should substantial soil off-haul be required, and previously undiscovered contamination be identified, implementation of Mitigation Measure GEO-2 requiring a final site-specific geotechnical plan to identify off-haul amounts and Mitigation Measure HAZ-2 requiring further evaluation of soil gas conditions and approval of the SMP by DTSC would address this issue. Therefore, no additional construction emissions would be expected.

Response B4-14: This comment references the traffic analysis which states "Although some trips to the retail component could be pass-by trips that make an interim stop on an already planned trip, route deviation from 40th Street or San Pablo Avenue would result in new traffic in the immediate vicinity of the project site. Therefore, no pass-by reduction was taken for this analysis." This statement is referring to the trip generation estimated for the proposed project. According to the CalEEMod Users Guide, the term "pass-by" under the "Trips and VMT" tab of CalEEMod refers to "trip purposes" which states that there are "primary", "diverted", or "pass-by" trip types in CalEEMod.[1] Consistent with the traffic analysis, to provide a conservative analysis, the estimated *trip generation* used in the CalEEMod analysis was not reduced to account for pass-by trips. The default trip link percentage was used in the CalEEMod analysis which is based on ITE and SANDAG data.[2]

Response B4-15: Based on the available evidence it would not be appropriate to edit the trip purpose type assumptions and the resulting trip length estimates used as the CalEEMod default values for the project. The default values represent the range of trip lengths that would be associated with the project trip generation, for which all trips, including "pass-bys" were included. It should also be noted that the trip lengths include longer length default trip distances for primary trips. Due to the high density of the surrounding areas, it could be argued that the longer trip lengths for other trip types should be reduced to account for the concentration of trip destinations within close proximity to

[1] California Emissions Estimator Model, 2016. CalEEMod User's Guide, page 28. Website: caleemod.com.

[2] California Emissions Estimator Model, 2016. CalEEMod User's Guide, Appendix A, page 26. Website: caleemod.com.

the project site. However, as with adjustments to the pass-by trip lengths, due to lack of supporting evidence (such as a trip origin destination survey specific to the project site), the most conservative approach is to use the default trip length and types, including the use of "pass-by" trips as assigned by default in CalEEMod. The trip generation assumptions used in the analysis were consistent with the traffic impact analysis and therefore the analysis appropriately identified potential trips.

Response B4-16: See Responses B4-6 through B4-15 regarding the commenter's proposed revisions to CalEEMod inputs leading to an incorrect assumption that significant previously not disclosed air quality impacts would occur and the Draft EIR should be recirculated. The commenter is incorrect, the SWAPE analysis did not conclude that *operational* emissions would be potentially significant. The SWAPE analysis incorrectly concludes that project *construction* emissions would exceed the BAAQMD thresholds. However, as shown in the revised Table IV.D-5 in Response B4-9, when the additional parameters are included, emission results would remain well below the BAAQMD significance criteria. The SWAPE letter did not provide CalEEMod output files for LSA to verify if the correct input parameters were used. As shown in Table IV.D-5 above, construction emissions would be well below the BAAQMD criteria and the project construction emissions presented by SWAPE are incorrect. The Draft EIR identified and analyzed the project's operational emissions starting on page 211. The Draft EIR need not be recirculated as none of the requirements for recirculation have been met. See also Response B2-99.

Response B4-17: As described in Responses B2-102 and B4-44, all project-generated trips were accounted for, therefore, the air quality analysis that relied on the traffic analysis, did not underestimated project-related air emissions. No new impacts are identified and no new mitigation measures are required. The Draft EIR need not be recirculated as none of the requirements for recirculation have been met. See also Response B2-99.

Response B4-18: The carbon intensity factor is based on the 2013 PG&E Guidance for Customers, which states that emission factors may be used for climate action planning purposes and greenhouse gas emission emissions tracking or reporting. A copy of the 2013 report, as well as the updated November 2015 document, is included in Appendix A to this RTC document. The 2015 document also confirms the estimated carbon intensity factor for 2020 is 290 lb/MWhr.

In response to AB 32, the California Air Resources Board was required to develop renewable energy standards in its Scoping Plan. In 2011, the California Legislature passed a renewable portfolio standard program which requires PG&E and other electric utilities to serve 33 percent of their customers' electricity needs with clean renewable energy by 2020. According to the latest scoping plan, the large utilities, such as PG&E are on track to

meet the 33 percent target by 2020.[3] The 290 lb/MWhr reflects the emission reductions achieved through implementation of the renewables portfolio standard. The emission rate was independently developed and verified by the California Public Utility Commissions (CPUC).[4] Therefore, the carbon intensity factor of 290 lb/MWhr used in the CalEEMod is appropriate to use in this analysis of 2020 greenhouse gas emissions (the opening year of the project).

Response B4-19: See Response B4-18. The reduction in greenhouse gas emissions was mandated in 2002 under Senate Bill 1078, accelerated in 2006 under Senate Bill 107 and expanded in 2011 under Senate Bill 2. Additionally, the commenter is incorrect in stating that the future estimates are not verified. The future estimates are provided and verified by the CPUC. Additionally, the PG&E document states that the emission factors can be used for purposes of climate change planning and greenhouse gas emission tracking which is consistent with estimating emissions for purposes of CEQA. Therefore, the use of the greenhouse gas emission intensity factor was appropriate and correct.

Response B4-20: Comment noted regarding PG&E's greenhouse gas emission intensity factors. Despite the drought conditions, according to the CPUC, PG&E is on-track to meet the mandated requirements of the renewable portfolio standard, additionally, other renewable sources of energy, such as solar power are not impacted by drought conditions. See Response B4-18 regarding the verification and appropriate use of PG&E emission estimates.

Response B4-21: The PG&E "customer document" (see the commenter's footnote 57) only indicates that the information in the document should not be used for regulatory compliance for the State's mandatory GHG reporting (required for utility companies). The document references using the emission factor forecast from the CPUC Greenhouse Gas Calculator, which when used, independently confirms the estimated 290 lb/MWhr for the year 2020. The project's opening year is 2020; therefore, the estimated emission factor for 2020, the same factor used in the Draft EIR, is appropriate for use in the project greenhouse gas analysis, and greenhouse gas emissions were not underrepresented for the project, and no additional analysis is required.

The commenter also contends that the *inputs* for the analyses of the project's greenhouse gas emissions should reflect the emissions of currently operating development. The Draft EIR does identify the current greenhouse gas emissions baseline conditions (starting on page 221) as required by CEQA Guidelines Section 15125(a) that states an EIR "…must include a description

[3] California Air Resources Board, 2014. *First Update to the Climate Change Scoping Plan.* Available online at: www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. May.

[4] E3, 2016. Projects, E3 Energy Planning Tools. Website: ethree.com/public_projects/cpuc2.php.

of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published… The environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." However, to determine the impacts of a project, it is important to identify the incremental increase in a potential impact associated with the project when it will be in operation. Similar to the traffic analysis that includes planned roadway improvements when modeling future conditions with the project; it was appropriate for the greenhouse gas emissions analysis to include 2020 estimates to represent the time the project would be in operation. Therefore, the use of the greenhouse gas emission intensity factor was appropriate and correct, and greenhouse gas emissions were not underrepresented. No additional analysis is required.

Response B4-22: As described in Responses B4-11 and B4-41 through B4-48, all project-generated trips were accounted for, and therefore, the air quality and greenhouse gas emissions analysis that relied on the traffic analysis, did not underestimated project-related air emissions.

Response B4-23: The commenter indicates that impacts from hazardous materials are not adequately disclosed, analyzed and mitigated. Regarding concerns associated with potential impacts from hazardous materials, refer to Master Response 3.

Response B4-24: The commenter indicates that there is substantial evidence that the Sherwin-Williams parcel poses a significant hazardous materials risk to construction workers, residents, and recreational users and that this conclusion is supported by evidence of unremediated soil and groundwater contamination on the southern part of the parcel, including the area containing the "Building 35" concrete building pad, which was constructed in the mid-1960s and has not yet been uncovered. Regarding concerns associated with residual contamination in soil and groundwater, refer to Master Response 3. The LUC for the Sherwin-Williams parcel does not indicate that further investigation is required prior to disturbance of the site.

Response B4-25: The commenter describes some of the soil gas and groundwater monitoring activities conducted at the project site and indicates that some of the soil gas levels were found to be above screening levels. The commenter's summary is noted for the record. While the need for additional analysis or evaluation of soil gas was not specifically mentioned in the comment, further evaluation of soil gas conditions and potential vapor intrusion to indoor air would be performed for the Sherwin-Williams property at DTSC's discretion, as required by the LUC. Regarding concerns associated with the need for additional analysis or evaluation of soil gas, refer to Master Response 3.

Response B4-26: The commenter states that groundwater monitoring indicates that elevated levels of VOCs, including dichloroethane and benzene, and arsenic remain at the site. The commenter further states that the Draft EIR does not describe

the extent of any previous investigations in the vicinity of the relatively large Sherwin-Williams "Building 35." Regarding concerns associated with residual contamination and investigation in the area of Building 35, refer to Master Response 3.

Response B4-27: The commenter further states that the Draft EIR does not describe the extent of any previous investigations in the vicinity of the relatively large Sherwin-Williams "Building 35" and that this area was occupied by railroad tracks and used by Sherwin-Williams for storing products and chemicals, and later used for product manufacturing. Regarding concerns associated with investigations in the area of Building 35, refer to Master Response 3.

Response B4-28: The commenter indicates that there is evidence of contamination on the Sherwin-Williams parcel outside of the area where soil was excavated and removed and that a previous report noted that the soil included a layer of black, gray and brown clay that was described as having a petroleum-like odor. Regarding concerns associated with residual contamination, refer to Master Response 3.

Response B4-29: The commenter indicates that DTSC has not yet provided public comments about the suitability of the Sherwin-Williams parcel for residential use, and that it is therefore speculative at this time to assume the Sherwin-Williams parcel is suitable for residential housing in light of data which shows contamination above cleanup goals, and potential additional contamination sources on the subject property. The commenter indicates that this does not alleviate the City of its obligation to fully investigate and disclose the foreseeable environmental impacts of the project, and that the Draft EIR should be revised to include a definitive determination, backed by a project-specific human health risk assessment that the Sherwin-Williams parcel is safe for human occupancy. Regarding concerns associated with the suitability of the project site for residential housing and requirements for further investigation of the Sherwin-Williams parcel refer to Master Response 3. Additionally, the LUC does not restrict the Sherwin-Williams parcel from being developed for residential use. The Draft EIR provides a sufficient amount of information concerning the current status of the project site and the findings of the DTSC. See also the comment letter from the DTSC (A4) and responses in this document.

Response B4-30: The commenter indicates that the City has improperly deferred investigating and disclosing the levels of contamination that persist throughout the project site, and failed to adequately analyze the remediation strategies and mitigation measures that will be needed to ensure protection of human health, and that an agency may not rely on mitigation measures of uncertain efficacy or feasibility. Regarding concerns associated with investigations, levels of residual contamination, and performing additional remediation at the project site, refer to Master Response 3.

The implementation of LUCs, SMPs, and engineering controls for potential vapor intrusion concerns is feasible and is a common practice to ensure protection of human health at properties with residual impacts from hazardous materials. The mitigation measures are therefore not of uncertain efficacy; are feasible and the Draft EIR adequately describes and mitigates the potential impacts related to hazardous materials.

Response B4-31: Please see Responses B4-6 through B4- 22 that address the commenter's issues concerning "air quality and greenhouse gas emissions limits."

Response B4-32: The commenter indicates that the Draft EIR acknowledges that contamination remains on the parcel above safe levels, and that pursuant to the LUC on the parcel, DTSC will require further investigation, excavated soil management and disposal procedures, and further engineering controls to address the contamination. Regarding concerns associated with residual contamination and DTSC requirements for the project site refer to Master Response 3.

The Draft EIR does not indicate that contamination remains on the Sherwin-Williams parcel "above safe levels." To the contrary, as discussed on page 299 of the Draft EIR, the LUC imposes environmental restrictions because VOCs and arsenic remain in groundwater and/or soil gas above the unrestricted cleanup goals as defined in the RAP. DTSC's requirement for further investigation of the Sherwin-Williams parcel applies only to the evaluation of soil gas conditions and indoor air quality prior to development, as required by the LUC. DTSC would determine whether engineering controls are needed to address potential vapor intrusion concerns based on future evaluations of soil gas conditions and indoor air quality.

Response B4-33: The commenter indicates that the project would require further excavation or soil handing to address the contamination. Regarding concerns associated with performing additional remediation at the project site, refer to Master Response 3 and Response B4-11. Soil excavation is not planned for remediation purposes; therefore, additional haul truck trips would not be anticipated. Therefore, no additional construction emissions would be expected.

Response B4-34: The commenter indicates that the City's proposed mitigation measures are not stringent enough to reduce the potential impacts of the project to a less-than-significant level. They recommend that to protect public health the City must first require, as part of its investigation of potential environmental impacts pursuant to CEQA, a thorough investigation and disclosure of the extent and character of residual contamination on the entire parcel, particularly those areas that are outside of the previous excavation zone, and under Building 35. The City should then ensure safe and proper remediation of any unsafe levels of contaminants, including the preparation of a HHRA to be included in a revised Draft EIR. The commenter indicates that the City should also require an enforceable worker Health and Safety Plan, which is

also a standard practice when redeveloping a contaminated site. Regarding concerns associated with mitigation measures and investigations of the project site (including in the area of Building 35), and the HHRA performed for the project site, refer to Master Response 3.

Worker health and safety regulations are discussed on pages 311 to 312 of the Draft EIR, including the requirement that workers at hazardous waste sites (or workers who may be exposed to hazardous wastes that might be encountered during excavation of contaminated soils) must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations. As discussed on pages 312 of the Draft EIR, California standards for workers dealing with hazardous materials are contained in California Code of Regulations (CCR) Title 8. CCR Title 8 includes requirements for preparation of Health and Safety Plans. As indicated on page 318 to 319 of the Draft EIR, the SMP would include a description of health and safety requirements and the SMP would be revised, if necessary, to include changes in health and safety requirements (e.g., worker training or personal protective equipment [PPE] requirements) if previously unidentified environmental hazards are discovered which require changes in health and safety requirements.

Response B4-35: The commenter indicates that the potential impacts of any residual contamination left in place on the project site will not be limited to vapor intrusion effects on indoor air quality, and that the project will include numerous parks and open space features that could expose children and others to unsafe levels of contaminated soil and soil vapor. The commenter suggests that the Draft EIR must be revised to include a HHRA that adequately addresses these risks. Regarding concerns associated with residual contamination and the HHRA performed for the project site, refer to Master Response 3.

DTSC requirements and the proposed mitigations measures of the Draft EIR address more than soil vapor effects on indoor air quality. Implementation of the SMP would ensure that soil used for park construction activities would not pose a health risk to the public as soil from the Sherwin-Williams parcel would be tested prior to potential re-use, and only clean (uncontaminated) soil would be imported to the site for use as fill. Soil vapor does not typically pose a risk of exposure in an outdoor setting as vapors quickly dissipate in an outdoor environment, and DTSC would consider proposed land uses, including parks, when evaluating whether further soil gas evaluation and engineering controls would be required to address potential exposure to soil vapor.

Response B4-36: The commenter indicates that disturbance of the Successor Agency parcel poses a significant and unmitigated risk to the health of construction workers, future residents, and recreational users of the project site. The commenter indicates that a regulatory determination that the Successor Agency parcel is suitable for housing or public park uses has not been made and that the Draft

EIR fails to identify the status of the cleanup on the Successor Agency parcel.

As discussed on pages 303 to 304 of Draft EIR, the Successor Agency parcel has a closed case status for a former leaking underground storage tank (LUST) case on the State Water Board's Geotracker database and has a current cleanup status of "referred to another agency" as of December 2007 on DTSC's Envirostor database.

As discussed on pages 300 to 301 of Draft EIR, many phases of environmental investigations and remediation activities have been performed at the Successor Agency parcel, and the March 2008 Site Cleanup Plan (SCP) developed by Erler & Kalinowski, Inc. (EKI, 2008) established cleanup goals for soil which would allow for future multi-family residential or park uses of the Successor Agency parcel. Following the completion of remedial excavation activities, soil impacted with concentrations of contaminants exceeding cleanup goals remained on the Successor Agency parcel due to the physical constraints preventing further excavation. As discussed on pages 304 of the Draft EIR, a draft No Further Action (NFA) letter for the Successor Agency parcel was submitted by the City to the San Francisco Bay Regional Water Quality Control and DTSC; however, DTSC stated that they could not concur with the NFA if concentrations remain above residential levels without a deed restriction. A preliminary draft deed restriction was prepared by the City in 2010, and in November 2015, the City initiated preparation of an exhibit showing those areas of the Successor Agency parcel that were not remediated in order to finalize a LUC for the Successor Agency parcel. In order to prepare the LUC as required by Mitigation Measure HAZ-2c, the exhibit and draft deed restriction would be submitted by the City to DTSC for review and incorporation into a LUC after the City signs a reimbursement agreement to fund DTSC's oversight, as required by DTSC. Regarding concerns associated with mitigation measures addressing residual contamination and suitability of the Successor Agency parcel for housing or a park, refer to Master Response 3.

Response B4-37: The commenter indicates that contaminants including VOCs may also be present beneath the Successor Agency parcel in soil vapor and that workers, future residents, and recreational users may be exposed to vapors. The commenter further indicates that the Draft EIR Mitigation Measure HAZ-2b, which requires an evaluation of soil gas conditions and indoor air quality, is inadequate, and that reliance on a future evaluation of vapor intrusion risks constitutes deferred mitigation. Regarding concerns associated with mitigation measures addressing residual contamination and suitability of the Successor Agency parcel for housing or a park, refer to Master Response 3.

Response B4-38: The commenter indicates that studies of vapor intrusion and soil contamination at the Successor Agency parcel should be conducted for inclusion in a revised Draft EIR, that a clear delineation of areas where soil contamination

remains above residential cleanup goals should also be included in a revised Draft EIR, and that only with proper disclosure of contamination conditions can the potential impacts on human health of residents and construction workers be understood. Regarding concerns associated with residual contamination at the Successor Agency parcel, refer to Master Response 3 and Response B4-35.

Soil vapor does not typically pose a risk of exposure in an outdoor setting as vapors are quickly dissipated in an outdoor environment, and DTSC would consider proposed land uses, including parks, when evaluating whether further soil gas evaluation and engineering controls would be required to address potential exposure to soil vapor. The LUC would include restrictions and requirements to prevent potential exposure to hazardous materials which are present in the subsurface of the Successor Agency parcel, as required by Mitigation Measure HAZ-2c. Additionally, an evaluation of soil gas conditions and indoor air quality would be performed for the Successor Agency parcel as required Mitigation Measure HAZ-2b, and an SMP would be prepared for the project site as required by Mitigation Measure HAZ-2d. DTSC oversight during implementation of these mitigation measures would ensure that the proposed land use of the Successor Agency parcel would not pose an unacceptable human health risk.

Response B4-39: This comment is introductory in nature for comments related to a review conducted by Daniel Smith. Responses to comments related to Daniel Smith's review are provided in Responses B4-84 through B4-103. To provide additional information regarding trip generation concerns and use of the MXD+ model, a memorandum has been prepared and is included as Appendix B to this document.

Response B4-40: See Responses B4-84 through B4-103 regarding additional information concerning trip generation and use of the MXD+ model. The MXD+ model was developed based on publically available data and has been used on numerous transportation assessments for projects in California with Certified Environmental Impact Reports dating back to 2009. Prior to being commonly referred to as the MXD+ model, it was referred to as the 4Ds model, which takes into consideration Density, Diversity (of uses), Design, and Destinations. That model was then expanded to include other variables, including demographics, such as average vehicle ownership per household, distance to transit, and development scale, and was renamed a mixed-use trip generation model or MXD+. The MXD+ method has been used in the City of Emeryville since 2013. The model is therefore reflective of City-specific considerations.

The model includes a validation site within the City of Emeryville (See Responses B4-84 through B4-103), and the trip generation adjustments are based on data specific to the project site and surrounding area, including the number of jobs within a 30-minute transit ride, the average vehicle

ownership of future residents, which was estimated based on Census data from the surrounding neighborhood, and other site specific factors.

Response B4-41: The MXD+ model validation included Bay Street in Emeryville, which was shown to generate 40 percent fewer vehicle trips than predicted by standard ITE rates. Please see Responses B4-84 through B4-103 that discuss the site specific data employed by the model.

Response B4-42: The model validation results referenced in the Draft EIR are included in Appendix C to this RTC Document. The validation results show that for the 27 mixed-use sites that were surveyed in California and across the country, including a site in Emeryville, the ITE method overestimated daily traffic generation by 24 percent and peak hour traffic by 35 percent to 37 percent.

The MXD+ method explains 97 percent of the variation in trip generation among MXDs, compared to 65 percent for the methods previously recommended by ITE. While remaining slightly (2 percent to 4 percent) conservative to avoid systematically understating impacts, MXD+ substantially reduces the 35 percent - 37 percent average overestimate of traffic generation produced by conventional ITE methods.

Response B4-43: Please see Response B4-44. As unadjusted ITE rates may include some level of transit, pedestrian or bicycle access to individual land uses, the MXD+ reductions reflect the increment of bicycle, pedestrian and transit use that could be expected given the project setting.

Response B4-44: Bicycle and pedestrian activity at the study intersections was observed as part of the transportation assessment. At the intersection of Horton Street at Sherwin Avenue, bicycle and pedestrian activity accounts for 20 percent of the total travel through the intersection during the weekday and Saturday peak hours; pedestrians volumes could be understated as the counts did not capture pedestrians that do not cross the street at the intersection. Similar ratios were observed at other intersections in the project vicinity. While bicycle and pedestrian travel can be impeded in some parts of Emeryville, the grid network and generally small block length in the project vicinity (300 to 600 feet) contributes to the walkable, bikeable nature of the project vicinity.

Improvements proposed as part of the project would also complete gaps in the bicycle and pedestrian network, including a Class I bicycle path along the western boundary of the project site that will connect to the South Bayfront Bridge, scheduled to start construction in Spring 2017. The bridge will provide a bicycle and pedestrian connection over the railroad tracks from Bay Street to Horton Landing Park, further reducing barriers to non-motorized travel in the project area. A focus of the City's Pedestrian and Bicycle Master Plan is to close gaps and reduce barriers to non-motorized travel.

Response B4-45: The actual level of parking provided by the project will be refined to meet the current City Code requirements at the time of project approval, which requires 1 parking space per unit, plus 0.20 spaces per unit for guest parking. The proposed level of parking cited for the project in the Draft EIR was based on the parking requirements at the time the initial project plans were prepared.

All residential parking will be unbundled from the rent cost to encourage lower rates of vehicle ownership within the residential portion of the project. A car share pod will be located within the project site to provide future residents access to a vehicle when needed, but without the cost of vehicle ownership. The project will also be required to implement a transportation demand management program to manage the proposed parking supply, with provisions for on-going monitoring and plan refinement.

Response B4-46: The VMT assessment presented in the Draft EIR acknowledges the fluid nature of the updated CEQA Guidelines. As there is uncertainty regarding preferred analysis approach, the results from several different analysis methods were presented in the Draft EIR. As summarized in the Draft EIR, the project would generate additional vehicle miles of travel, but it would generate vehicle miles of travel at a rate lower than existing uses in Emeryville.

As noted in the Draft EIR, automobile level of service was not assessed as a CEQA metric but intersection levels of service were evaluated for informational purposes to determine if there are recommended improvements to the transportation system that would enhance mobility for vehicle traffic, including transit vehicles, which would not result in secondary impacts to other modes of travel.

For intersections where level of service deficiencies were identified for vehicles, potential improvements were reviewed. For some intersections, planned improvements, to which the project would contribute its fair share, would improve levels of service. For other intersections, physical improvements were not proposed as improvements that would reduce peak hour vehicle delay, as they would conflict with other travel modes through the intersection and were not consistent with other adopted plans, including the Transportation Impact Fee Study and the Pedestrian and Bicycle Plan.

Response B4-47: The commenter does not identify what information is not included in the project description such that it is incomplete. Please see Master Response 1 for information required to be included in an EIR project description.

Response B4-48: The commenter indicates that the Draft EIR does not adequately describe how contaminated groundwater will be treated and conveyed offsite during construction dewatering operations. As specified in the Draft EIR (starting on page 318), dewatering and effluent discharge activities are required to be

fully described in the SMP. Dewatering activities are typically conducted by either pumping water directly from open excavations or by installing dewatering wells adjacent to the open excavation. In either case (but more so with open excavation dewatering), dewatering effluent may contain turbid water (i.e., water that contains sediment) and residual contaminants that may be present in soil or groundwater. This potentially contaminated turbid water, if discharged directly to receiving waters without treatment, could cause degradation of the receiving water quality.

Any groundwater dewatering would limited in duration and would be subject to permits from East Bay Municipal Utility District (EBMUD) or the Regional Water Quality Control Board (RWQCB), depending if the discharge were to the sanitary or storm sewer system. Under existing State law, it is illegal to allow unpermitted non-stormwater discharges to receiving water. As stated in the Construction General Permit:

> "Non-stormwater discharges directly connected to receiving waters or the storm drain system have the potential to negatively impact water quality. The discharger must implement measures to control all non-stormwater discharges during construction, and from dewatering activities associated with construction.

In addition, the Construction General permit states that discharging any pollutant-laden water that will cause or contribute to an exceedance of the applicable Regional Water Board's Basin Plan from a dewatering site or sediment basin into any receiving water or storm drain is prohibited.

The Construction General Permit allows the discharge of dewatering effluent if the water is properly filtered or treated, using appropriate technology. These technologies include, but are not limited to retention in settling ponds (where sediments settle out prior to discharge of water) and filtration using gravel and sand filters (to mechanically remove the sediment). If the dewatering activity is deemed by the RWQCB not to be covered by the Construction General Permit, then the discharger could potentially prepare a Report of Waste Discharge, and if approved by the RWQCB, be issued site-specific Waste Discharge Requirements under the National Pollutant Discharge Elimination System (NPDES) regulations. Site–specific WDRs contain rigorous monitoring requirements and performance standards that, when implemented, ensure that receiving water quality is not substantially degraded.

If the water is not suitable for discharge to the storm drain (receiving water), as discussed above, dewatering effluent may be discharged to EBMUD's sanitary sewer system if special discharge criteria are met. These include, but are not limited to, application of treatment technologies or Best Management Practices (BMPs) which will result in achieving compliance with the wastewater discharge limits. Discharges to EBMUD's facilities must occur

under a Special Discharge Permit. Per the EBMUD Wastewater Ordinance, "wastewater may be discharged into community sewers for interception, treatment, and disposal by the District provided that such wastewater does not contain substances prohibited, or exceed limitations of wastewater strength, set forth in this Ordinance" (Title II, Section 1).

In addition, per the EBMUD Wastewater Ordinance "all dischargers, other than residential, whose wastewater requires special regulation or contains industrial wastes requiring source control shall secure a wastewater discharge permit" (Title IV, Section 1).

As demonstrated above, EBMUD regulates the inputs into its facilities. EBMUD also operates its wastewater treatment facilities in accordance with Waste Discharge Requirements issued by the RWQCB, which require rigorous monitoring of effluent to ensure discharges do not adversely impact receiving water quality. Dewatering effluent from the site may contain trace levels of contamination that may possibly exceed the discharge standards of EBMUD. In this case, the water would likely be treated using proven technologies (e.g., filtration to remove sediment and/or advanced treatment technologies to remove other pollutants) to the degree the effluent could be discharged (under permit) to the storm or sanitary sewers. Compliance with permit requirements would ensure that the water is tested prior to discharge to ensure that the treatment technologies are effective.

Since proper management of dewatering effluent is covered by existing State and local regulations, and implementation of these regulations would protect receiving water quality, the project would have no significant impacts on receiving water related to discharge of dewatering effluent.

Response B4-49: The commenter states that post-construction stormwater management is not adequately described in the Draft EIR and does not describe the proposed extent of upgrades to the storm drainage system along Sherwin Avenue. The commenter further states that the Draft EIR fails to "disclose the potentially significant contamination that will be released when those lines are replaced."

Please refer to Response B2-74 for more information about post-construction stormwater management. With regard to the extent of storm drainage system upgrades, the Draft EIR describes the proposed improvements on page 292. As described in the Draft EIR, preliminary hydraulic calculations indicate that implementation of the project would result in a reduction of impervious surfaces relative to existing conditions. Based on these preliminary calculations, total stormwater runoff from a 10-year storm with a 10-minute duration is estimated to decrease from 18.45 to 15.17 cubic feet per second, resulting in a net benefit to the capacity of local storm drainage systems. However, the Draft EIR acknowledges that the storm drain system on Halleck Street is near capacity and therefore requires, by Mitigation Measure

HYD-2, upgraded drainage components to be designed in compliance with City of Emeryville standards, reviewed by the City of Emeryville Department of Public Works and any improvements deemed necessary by the City, be part of the conditions of approval.

With regard to "potentially significant contamination that will be released when those lines are replaced", the preparers of the Draft EIR disagree with this statement. Replacing aging storm drainage infrastructure with new components will decrease the potential for the discharge of residual contaminants that may be located in the subsurface because infiltration and inflow into the system would be reduced (i.e., the new lines would be essentially watertight and reduce or eliminate the inflow of subsurface water).

Response B4-50: As shown on revised Table IV.D-5 of the Draft EIR (see Response B4-56), project construction emissions would not exceed the exhaust emission thresholds, therefore any reduction in fleet-wide averages that could be achieved through implementation of Mitigation Measure AIR-1 would not be required to reduce impacts to a less- than-significant level. As stated on page 210 of the Draft EIR, "although the project would not exceed the exhaust emission thresholds, the BAAQMD recommends the implementation of Best Management Practices to reduce construction dust impacts to a less-than-significant level." The specific bullet in the mitigation measure related to the development of the off-road equipment plan would further reduce the impacts that were identified as less than significant. To clarify the measure, Mitigation Measure AIR-1 will be modified as follows to specify that the fleet-average should be reduce as compared to the average 2015 ARB fleet average.

In response to this comment, page 210 of the Draft EIR is revised as follows:

> Mitigation Measure AIR-1: Consistent with guidance from the BAAQMD, the following actions shall be required in relevant construction contracts and specifications for the project:
>
> - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
> - All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
> - All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
> - All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).

- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Construction equipment idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- The project applicant shall post a publicly visible sign with the telephone number and person to contact at the City of Emeryville regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.
- All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or a moisture probe.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- Vegetative ground cover (e.g., fast-germinating native grass seed) or other plants that offer dust mitigation measures shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. To the extent feasible, activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than 1 percent.
- The project contractor shall use low volatile organic compound (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).

- All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NO_x and PM.
- All contractors shall use equipment that meets California ARB's most recent certification standard (as of 2016, the certification date is July 26, 2007) for off-road heavy duty diesel engines.

Response B4-51: The commenter states that the LID treatment requirements specified in Mitigation Measure HYD- 1b are vague and that the City should identify what types of stormwater treatment options are available on the site (including a determination regarding whether the project will comply with NPDES requirements). Compliance with NPDES provision is required by law and it is the City's responsibility to ensure that new development "regulated projects" (as identified in the NPDES Municipal Regional Permit, of which the project is one) comply with LID requirements. Specific LID measures have not been designed (only conceptual measures such as tree wells and stormwater planters have been identified). It is not possible for the City to determine C.3 compliance prior to preparation of the site-specific Stormwater Control Plan that is based on final design of the project.

Response B4-52: The City contacted East Bay Municipal Utility District (EBMUD) regarding the Water Supply Assessment (WSA) for the project site. EBMUD noted that the water demand associated with the proposed project would be less than the project proposed in 2005. EBMUD, the water provider, determined that the WSA approved in 2005 is still valid and that a second WSA is not required for the proposed project. See also the letter from EBMUD (A2) and the responses to that letter contained in this document.

Response B4-53: As described in Responses B4-1 through B4-54, the Draft EIR identifies impacts associated with implementation of the proposed project. The City's review of the Draft EIR in light of these comments has shown that the Draft EIR is adequate and does not suffer from any serious errors or emissions such that recirculation of the Draft EIR would be required pursuant to CEQA Guidelines Section 15088.5.

Response B4-54: This comment is an attachment to the letter and reproduces a report from SWAPE as well as introductory remarks paragraph contained in the SWAPE report. Responses to this report have been made in previous responses to comments; however, the following responses address specific issues identified in the SWAPE letter.

Response B4-55: The commenter indicates that cleanup goals have not been achieved at the Sherwin-Williams parcel, that the Successor Agency parcel has not been evaluated for vapor intrusion and remains and open site under regulatory investigation, and that the Draft EIR should not be certified until these parcels have been cleared for residential use.

Regarding concerns associated with residual contamination and the measures that would be implemented to ensure that the project site would be suitable for residential use refer to Master Response 3.

Response B4-56: The commenter summarizes information regarding environmental investigations and findings at the Sherwin-Williams parcel and indicates that areas of the Sherwin-Williams parcel that were not remediated pose a risk to construction workers, future residents, and recreational users of the Project site.

Regarding concerns associated with residual contamination and the measures that would be implemented to ensure that construction workers, future residents, and recreational users of the project site would not be exposed to hazardous materials refer to Master Response 3.

Response B4-57: The commenter summarizes information regarding the area of Building 35 at the Sherwin-Williams parcel, and indicates that the extent of previous investigations in this area is not clear and that the former use of this area as a large railroad spur area poses potential environmental concerns. Regarding concerns associated with residual contamination and investigation in the area of Building 35 refer to Master Response 3.

Response B4-58: The commenter indicates that there is evidence of contamination on the Sherwin-Williams parcel outside of the area where soil was excavated and removed and that a previous report noted that the soil included a layer of black, gray and brown clay that was described as having a petroleum-like odor. Regarding concerns associated with residual contamination refer to Master Response 3.

Response B4-59: The commenter indicates that DTSC has not yet provided public comments about the suitability of the Sherwin-Williams parcel for housing, and that it is therefore speculative at this time to assume the Sherwin-Williams parcel is suitable for residential housing in light of data which shows contamination above cleanup goals, and potential additional contamination sources on the subject property.

Regarding concerns associated with the suitability of the project site for residential housing, refer to Master Response 3. The LUC does not restrict the Sherwin-Williams parcel from being developed for residential use.

Response B4-60: The commenter indicates that the Draft EIR should be revised to include a definitive determination, backed by a project-specific human health risk assessment that the Sherwin-Williams parcel is safe for human occupancy, and that the City cannot defer investigation of contamination at the project site and analyze the remediation strategies and protective measures that will be used to ensure the protection of human health.

Regarding concerns associated with investigations and the HHRA performed for the Sherwin-Williams parcel, levels of residual contamination, performing additional remediation, the suitability of the project site for residential housing, refer to Master Response 3. The LUC does not restrict the Sherwin-Williams parcel from being developed for residential use. The Draft EIR provides a sufficient amount of information concerning the current status of the project site and the findings of DTSC.

Response B4-61: Regarding the potential for additional remediation of contaminated soil and groundwater at the project site see Master Response 3. Regarding the potential effects of air pollutant and GHG emissions associated with construction activities and site remediation see Responses B4-6 through B4-22.

Response B4-62: The commenter indicates that inadequate investigation and cleanup parameters for residential and park uses of the Sherwin-Williams parcel would likely have an adverse effect on the health of occupants, and that the City must analyze and enforce a stringent worker Health and Safety Plan to protect worker health. Regarding concerns associated with investigations, cleanup, and suitability of the project site for housing, and worker health and safety, refer to Master Response 3. Also see Response B4-34 regarding worker health and safety regulations.

Response B4-63: The commenter indicates that a regulatory determination that the Successor Agency parcel is suitable for housing or public park uses has not been made and that the Draft EIR fails to identify the status of the cleanup on the Successor Agency parcel. Regarding concerns associated with the current regulatory and cleanup status of the Successor Agency parcel and its suitability for housing or public park uses, refer to Response B4-36.

Response B4-64: The commenter indicates that a deed restriction for the Successor Agency parcel has not been prepared and submitted for agency review and that the regulatory status of the Successor Agency parcel on the DTSC's Envirostor website is open. Regarding concerns associated with the current regulatory status of the Successor Agency parcel and the status of the deed restriction being prepared for the Successor Agency parcel refer to Response B4-36.

Response B4-65: The commenter indicates that contaminants remain in soils at the Successor Agency parcel in excess of residential cleanup goals and that cleanup activities conducted in 2008 were not completed because of excavation could not proceed under adjacent buildings, railroad tracks and sidewalks.

Regarding concerns associated with residual contamination at the Successor Agency parcel and the measures that would be implemented to ensure that the Successor Agency parcel is suitable for housing or park uses, refer to Master Response 3.

Response B4-66: The commenter indicates that contaminants including VOCs may also be present beneath the Successor Agency parcel in soil vapor and workers and future residents may be exposed to vapors. The commenter further indicates that the Draft EIR Mitigation Measure HAZ-2b, which requires an evaluation of soil gas conditions and indoor air quality, is inadequate, and that reliance on a future evaluation of vapor intrusion risks constitutes deferred mitigation, and that studies of vapor intrusion and soil contamination at the Successor Agency parcel should be conducted for inclusion in a revised Draft EIR.

Regarding concerns associated with mitigation measures addressing residual contamination and suitability of the Successor Agency parcel for housing or a park, refer to Master Response 3.

Response B4-67: The commenter indicates that a clear delineation of areas where soil contamination remains above residential cleanup goals should also be included in a revised Draft EIR, and that only with proper disclosure of contamination conditions can the potential impacts on human health of residents and construction workers be understood. Regarding concerns associated with residual contamination at the Successor Agency parcel, refer to Master Response 3 and Responses B4-35 and B4-36.

Response B4-68: The commenter indicates that Mitigation Measure HAZ-2b, which requires an evaluation of soil gas conditions and indoor air quality at the Successor Agency parcel and approval from DTSC before construction permits are issued for residential housing on the Successor Agency parcel, is inadequate, and that reliance on a future evaluation of vapor intrusion risks constitutes deferred mitigation. Regarding concerns associated with mitigation measures addressing residual contamination and suitability of the Successor Agency parcel for housing, refer to Master Response 3.

Response B4-69: The commenter indicates that the City must investigate and disclose the extent of contamination that remains at the Successor Agency parcel, and must ensure proper mitigation measures are in place to protect future residents, constructions workers, and nearby residents. The commenter also indicates that studies of vapor intrusion and soil contamination at the Successor Agency parcel should be conducted for inclusion in a revised Draft EIR, and a clear delineation of areas where soil contamination remains above residential cleanup goals should also be included in a revised Draft EIR.

Regarding concerns associated with the extent of residual contamination, mitigation measures addressing residual contamination, and suitability of the Successor Agency parcel for housing or park uses, refer to Master Response 3.

Response B4-70: The commenter indicates that the potential impacts of any residual contamination left in place on the project site will not be limited to vapor intrusion effects on indoor air quality, and that the Project will include

numerous parks and open space features that could expose children and others to unsafe levels of contaminated soil and soil vapor.

Regarding concerns associated with residual contamination, refer to Master Response 3. Regarding concerns associated with exposure of children and other park users to contaminated soil and soil vapor, refer to response B4-35.

Response B4-71: This comment is introductory in nature and claims that the Draft EIR fails to adequately characterize and analyze air quality and greenhouse gas emissions. The comment contends that there are unsubstantiated input parameters used to estimate project emissions. This commenter questions the input values used in the Draft EIR Section IV.D, Air Quality and IV.E, Greenhouse Gas Emissions analysis. The comment claims that emissions associate with the project are underestimated. Please see Responses B4-72 through B4-82 for responses to comments raised by the commenter. The Draft EIR is adequate and does not suffer from any serious errors or emissions such that recirculation of the Draft EIR would be required pursuant to CEQA Guidelines Section 15088.5. See also Response to Comment B2-99 that directly addresses CEQA Guidelines Section 15088.5.

Response B4-72: As shown in the CalEEMod output files in Appendix C of the Draft EIR, the total acreage for the project was included in the model. For residential uses, the lot acreage includes grading for parking and landscaping, therefore, these additional uses were not included as separate uses. Based on the findings of the project traffic analysis, the park would not result in substantial trip generation, as an independent land use of the project; therefore, for purposes of the CalEEMod analysis, the acreage for this use was only included as a portion of the residential use which incorporates ancillary features in the emissions estimates, and were not identified as a separate use. Based on CalEEMod default values, the park would generate a total of two trips per day on weekdays and weekends. This minimal trip generation would not result in any changes to the emission results presented in IV.D-6 of the Draft EIR. On street parking spaces would also not be included as a separate land use for purposes of this analysis as paved surfaces were included as part of the total residential acreage.

The total trips assumed in CalEEMod are consistent with the traffic analysis conducted for the project. The traffic analysis found that due to the small size of the park use, it would not generate a substantial number of new trips.

Response B4-73: Construction activities, including paving for parking spaces and roads and construction of the park, were included in the CalEEMod analysis. See also Responses B4-9 and B4-72.

Response B4-74: In regards to the comment that the park land use and associated trips during operation was omitted from the CalEEMod model, see Responses B4-9 and B4-72.

Response B4-75: In regards to the concern that the building space for the residential component of the project was not property included in the the CalEEMod model, see Responses B4-9 and B4-72.

Response B4-76: The carbon intensity factor is based on the 2013 PG&E Guidance for Customers, which states that emission factors may be used for climate action planning purposes and GHG emission tracking or reporting. A copy of the report, as well as the updated November 2015 document, is included in Appendix A to this document. The 2015 document also confirms the estimated carbon intensity factor for 2020 of 290 lb/MWhr.

Response B4-77: In response to AB 32, the California Air Resources Board was required to develop renewable energy standards in its Scoping Plan. In 2011, the California Legislature passed a renewable portfolio standard program which requires PG&E and other electric utilities to serve 33 percent of their customers' electricity needs with clean renewable energy by 2020. According to the latest scoping plan, the large utilities, such as PG&E are on track to meet the 33 percent target by 2020.[5] The 290 lb/MWhr rate reflects the emission reductions achieved through implementation of the renewable portfolio standard. The emission rate was independently developed and verified by the California Public Utility Commissions (CPUC).[6] Therefore, the Carbon intensity factor of 290 lb/MWhr used in the CalEEMod is appropriate to use in this analysis of 2020 greenhouse gas emissions (the opening year of the project).

Response B4-78: The reduction in greenhouse gas emissions was mandated in 2002 under Senate Bill 1078, accelerated in 2006 under Senate Bill 107 and expanded in 2011 under Senate Bill 2.The future estimates are provided and verified by the CPUC. Additionally, the PG&E document states that the emission factors can be used for purposes of climate change planning and greenhouse gas emission tracking which is consistent with estimating emissions for purposes of CEQA. The PG&E document does say you can take the last 5 years of data to predict future emissions; however, the document then goes on to say you can also reference CPUC data. As indicated in Response B4-77, the emission rate used was independently developed and verified by the CPUC. Therefore, the use of the greenhouse gas emission intensity factor was appropriate and correct.

Response B4-79: The commenter is correct that the approximately 7,000 cubic yard of soil that would be imported to the site was inadvertently omitted. However, the import of soil would be limited to this amount that would be used for landscaping features on the site. As noted in Responses B4-11 and B4-32,

[5] California Air Resources Board, 2014, op. cit.

[6] E3, 2016, op. cit.

additional soil excavation is not planned for remediation purposes; therefore, additional haul truck trips would not be anticipated.

Response B4-80: An additional CalEEMod analysis has been conducted to assess the additional haul trip emissions. The updated analysis also includes the park and roadways. See Response B4-9 for revisions to Table IV.D-5.

The emission results shown in revised Table IV.D-5 include double counting of construction emissions as park and asphalt surfaces, since these would have been incorporated into the residential construction emissions. Nevertheless, with the addition of these emissions, as shown in the revised Table IV.D-5, total construction emissions would still be well below the BAAQMD's significance criteria. This analysis is provided to clarify the analysis contained in the Draft EIR, and no new or more severe impacts were identified as a result of this analysis, and no new mitigation measures are required.

Response B4-81: This comment references the traffic analysis which states "Although some trips to the retail component could be pass-by trips that make an interim stop on an already planned trip, route deviation from 40th Street or San Pablo Avenue would result in new traffic in the immediate vicinity of the project site. Therefore, no pass-by reduction was taken for this analysis." This statement is referring to the trip generation estimated for the proposed project. The traffic analysis is indicating that for purposes of evaluating operational conditions on surrounding roadways a "pass-by" trip reduction was not taken. Consistent with the traffic analysis, the estimated *trip generation* used in the CalEEMod analysis was not also reduced to account for pass-by trips. According to the CalEEMod Users Guide, the term "pass-by" under the "Trips and VMT" tab of CalEEMod refers to "trip purposes" which states that there are "primary", "diverted", or "pass-by" trip types in CalEEMod with varying trip lengths.[7] The trip lengths for these purposes are based on census data and data collected by the Institute of Traffic Engineers by land use type. Based on the available evidence it would not be appropriate to edit the trip purpose type assumptions and the resulting trip length estimates used as the CalEEMod default values. Traffic is estimated to be diverted from areas within a mile of the site and the default values represent the range of trip lengths that would be associated with the project trip generation. All generated trips were included. It should also be noted that the trip lengths include longer default trip lengths for primary trips. Due to the high density of the surrounding areas, it could be argued that the longer trip lengths for other trip types should be reduced to account for the concentration of trip destinations within close proximity to the project site. However, again, due to lack of supporting evidence (such as a trip origin destination survey specific to the project site), the most conservative approach is to use

[7] California Air Pollution Control Officers Association, 2015. CalEEMod User's Guide, page 28. Website: caleemod.com.

the default trip length and types, including the use of "pass-by" trip lengths assigned by default in CalEEMod. The trip generation assumptions used in the analysis were consistent with the traffic impact analysis and therefore the analysis was appropriate.

Response B4-82: The SWAPE analysis concludes that project construction emissions would exceed the BAAQMD thresholds. However, as shown in the revised Table IV.D-5 above, when the additional parameters are included in the model, emission results would remain well below the significance criteria. The SWAPE letter did not provide CalEEMod output files for LSA to verify if the correct input parameters were used. As shown in Table IV.D-5 above, construction emissions would be well below the BAAQMD criteria and the project construction emissions presented by SWAPE are incorrect.

Response B4-83: This comment provides the resume and background of the SWAPE report authors.

Response B4-84: This comment is an attachment to the letter and reproduces a report from Smith Engineering & Management to the commenter. This comment includes introductory paragraphs as well. Responses to comments related to Daniel Smith's review are provided in Responses B4-39 through B4-46 as well as the following responses.

Response B4-85: This comment describes the trip generation approach. Specific trip generation concerns are addressed in subsequent responses. Please also see the memorandum included in Appendix B for additional information.

Response B4-86: Trip generation rates presented in the Institute of Transportation Engineers publication *Trip Generation Manual* typically based on trip generation surveys at stand-alone suburban land uses with separate driveways for ease of capturing the trip generating characteristics of specific uses. At many of these sites, the available of transit is typically negligible, with minimal walking and bicycle trips. As noted in the Manual:

> "At specific sites, the user may wish to modify trip generation rates presented in this document to reflect the presence of public transportation service, ridesharing, or other transportation demand management measures; enhanced pedestrian and bicycle trip-making opportunities; or other special characteristics of the site or surrounding area.

Based on guidance provided by ITE, the trip generation estimates were adjusted to account for Emeryville characteristics.

Response B4-87: This comment is introductory in nature for specific concerns addressed in Response B4-88.

Response B4-88: The comment presents journey to work data for persons who are employed in Emeryville from the American Community Survey in 2014. The data shows that of people employed in Emeryville, approximately 81 percent drove a vehicle to work (either alone or as part of a carpool), with approximately 9 percent taking transit, and 6 percent walking or biking. The commenter identifies that the non-auto mode shares are lower than assumed for the Sherwin-Williams development. This discrepancy is due to several factors:

- American Community Survey data only presents data on work related trips, not other types of trips resulting in non-work trips, which can account for up to 55 percent of trips, not reflected in the mode shared referenced by the commenter.
- Mode share reductions for the project are based on project and location specific factors that would be different in other parts of Emeryville.
- Trip Generation estimates considered the Transportation Demand Management strategies that would be incorporated as part of the project, including unbundling of parking and maximum parking requirements.

Additional information regarding the model validation is provided in the Trip Generation memo in Appendix B, which includes information on Emeryville sites included in the validation effort.

Response B4-89: The disclaimer noted in the comment is to caution the user to consider the appropriateness of the model for the intended use as it is not the appropriate tool for all projects. The proposed Sherwin-Williams site is within the range of sites surveyed for inclusion in the model, including the validation sites.

Response B4-90: Please see the Trip Generation memo in Appendix B for additional information regarding the model and its validity. Disclaimers are added to the model to discourage untrained users from misapplication of the model.

Response B4-91: This comment notes that there are peer reviews of the MXD data and model but does not note a specific issue or error in the Draft EIR.

Response B4-92: Please see Trip Generation memo in Appendix B for additional information regarding the model and its validity. Additional information regarding validation sites as well as other certified EIRs where this method has been employed is also presented in the memo.

The fundamental assumption of model development is to ensure that the data used to derive the model represents the same type of data/project you are trying to estimate. Therefore, the comment that similar sites that were used to development the model were used to calibrate the model indicates that the model is performing as intended.

Response B4-93: The commenter is referring to an outdated version of the model with these comments. The original EPA research was lacking some details in the initial

models, but these details have been added as additional data has become available. These details are reflected in the most current version of the model used for the Sherwin-Williams project, which includes peak hour validation, which is further discussed in the Trip Generation memo in Appendix B.

As shown by the comment, the site is within the range of data collected to develop the model.

Response B4-94: Please see Response B4-86 regarding trip generation rates.

Response B4-95: Please see Response B4-44 regarding bicycle and pedestrian activity.

Response B4-96: Please see Response B4-44 regarding bicycle and pedestrian activity.

Response B4-97: Please see Response B4-45 regarding parking.

Response B4-98: The commenter summarizes the comments regarding trip generation. No new information is provided, and the comment does not address information contained in the Draft EIR.

Response B4-99: Please see Response B4-46 regarding the VMT Assessment.

Response B4-100: Please see response B2-112 regarding intersection improvements.

Response B4-101: Please see response A3-2 regarding transit, bicycle and pedestrian operations.

Response B4-102: This comment is conclusory in nature. In light of the information provided in the previous responses, the City and EIR authors disagree that the Draft EIR transportation and circulation section is "flawed and inadequate, should be completely redone and must be recirculated in draft status." The Draft EIR is adequate and the mitigation measures are clear and appropriate. See also Response B2-99 regarding CEQA requirements for Draft EIR recirculation.

Response B4-103: This comment provides a resume for the preparers of the Smith Engineering & Management report.

Letter
B5

John DeMerritt
John DeMerritt Bookbinding
1420 45th st. 21
Emeryville, CA 94608
johndemerritt@sbcglobal.net
510 654-5060

Miroo Desai, AICP
Senior Planner
City of Emeryville
1333 Park Avenue
Emeryville, CA

05/16/2016

My name is John DeMerritt. I am the current President of the Board of Directors of the 45th st. Artists' Cooperative.
The mission of the 45th Street Artists' Cooperative is to provide *affordable* live/work space for artists in a supportive environment. In addition to providing live/work space for artists, the Cooperative runs the Emeryville Youth Art Project, offering tutorials, field trips, and arts methods demonstrations to promising high school students.

I am writing about the very real quality of life issues that we at the Coop and our neighbors in the larger residential area surrounding the Sherwin Williams site are faced with in the construction and implementation of the massive development at the Sherwin Williams Site. I am convinced that the Draft EIR does not address these concerns, and that it is a flawed document. 1

Our Community welcomes a new development at the Sherwin Williams location. Living next to a very large, and until recently, a very contaminated vacant lot is not ideal for us.

We have been living and working in our buildings for 30 years. Our buildings are old factories retrofitted to serve our needs as artists. Our ventilation system is our open windows. Our light comes through our windows and skylights. Our buildings are permeable and exposed. When a proposed 32-34 month long construction project happens across the street from us, we can't go home to escape it, because we live and work in our homes, 24 hours a day. The majority of construction equipment, as listed in Table IV F-13, produces between 80 and 96 decibels at a range of 50 feet. (that's equivalent to standing next to a food blender at 3 feet and being inside a New York Subway on either end of that range, according to Table IV F-2) The EIR gives such scant recognition to the fact that 70% of residencies surrounding the Sherwin Williams site are identified as Live/Work. 2
For instance, Mitigation Measure NOI-3 implements a few of the following measures:

Letter
B5
Cont.

-General construction noise shall be limited on weekdays from 7am to 6pm (11 hours a day) and on weekends from 8am to pm.
-the rest of the directives are vague and opaque, like using "smaller and quieter equipment" "turning off idling equipment" "placing noisy equipment away from sensitive areas"
The conclusion is given that implementation of the measures given in NOI-3 would "reduce the construction noise impacts to a less than significant noise impact."
As someone who lives and works 40 feet away (I measured it today) I would really like to see more data to support a claim like that. **2 cont.**

The EIR also concludes that Construction dust would be generated at levels that could create "an annoyance to occupants of nearby properties", but construction emissions would not exceed the BAAQMD's threshold for average daily construction emissions.
The coop was intimately involved in the year long cleanup process that occurred on this site in from March 2011 to April 2012. We negotiated with Sherwin Williams to remove debris and soil contaminated with arsenic and lead by rail instead of truck in order to lessen a potential major health hazard. This construction project presents a potential health hazard to our community's members. Again, I would like to see more data that supports the claim that the dust and emissions generated by a project this size will be merely annoying. **3**

COMMENTER B5

45th Street Artists' Cooperative
John DeMerritt
March 8, 2016

Response B5-1: This comment is mainly introductory in nature and describes the letter writer and the 45th Street Artists' Cooperative.

The letter includes a statement regarding "quality of life issues" that "the Draft EIR does not address….and that it is a flawed document." "Quality of life" is not specifically a topic addressed under CEQA as it is an amalgamation of multiple aspects of one's life and it is perceived differently by different people. It could include issues required to be discussed under CEQA, such as traffic and air quality, but could also include social issues not address under CEQA (CEQA Guidelines Section 15131).

The comment does include references to construction impacts: construction traffic impacts are discussed in Section IV.C, Transportation and Circulation; construction related air quality impacts are discussed in Section IV.D, Air Quality; and construction related noise impacts are discussed in Section IV.F, Noise. The commenter does not provide specific concerns regarding the analysis within the Draft EIR to which specific responses can be provided.

Response B5-2: Table IV.F-13 lists typical construction equipment maximum noise levels for different pieces of equipment. The project is not proposing the use of pile drivers or rock drills. Therefore, these pieces were not included in the analysis. As described on page 266 of the Draft EIR, the maximum noise level from multiple pieces of equipment operating on the site at one time is expected to be 91 dBA L_{max} at a distance of 50 feet from an active construction area. The City does not distinguish between typical residential or commercial space and live/work uses. To meet the requirements of the noise ordinance, the City limits the permissible hours of construction. Implementation of Mitigation Measure NOI-3 would limit construction to the permissible hours and would implement additional measures to reduce potential construction noise impacts. Therefore, as identified in the Draft EIR, construction of the project would not result in a significant impact to the live/work units in the project vicinity.

Response B5-3: Mitigation Measure AIR-1 on page 210 of the Draft EIR would require implementation of the BAAQMD's Best Management Practices and enhanced measures that would further reduce construction emissions and fugitive dust emissions associated with project construction. Implementation of the measures would reduce dust annoyance to nearby properties and according to the BAAQMD, would reduce dust impacts to a less than significant level. The measure would require watering two times per day,

street sweepers, limited speeds on unpaved roads and vegetative ground cover would be planted in disturbed areas. According to the BAAQMD CEQA Guidelines, implementation of these practices would reduce fugitive dust impacts to a less than significant level.[8]

[8] Bay Area Air Quality Management District, 2011. *Air Quality CEQA Guidelines.* May.

C. INDIVIDUALS

Letter C1

From: Will Leben [mailto:leben@stanford.edu]
Sent: Monday, January 25, 2016 1:03 PM
To: Website DL - Clerk's Office
Subject: Comment on DEIR for Sherwin Williams project

I object to the negative impacts that the proposed Sherwin Williams development will have on traffic on Emeryville bicycle boulevards. These impacts are summarized on pp. 164-168 of the PUBLIC REVIEW DRAFT. SHERW I N - W I L L I A M S D EVELOPMENT PROJECT ENVIRONMENTAL I M PACT REPORT. **1**

The new project worsens an existing problem, namely that the bicycle boulevard traffic levels already exceed allowable limits.

Bicycling and walking is very unsafe in Emeryville, and the DEIR shows that Sherwin Williams will make it even less safe. Our streets already have many speeding cars, and our intersections already have many cars entering them after traffic signals turn yellow. Enforcement of basic traffic laws is very low. **2**

Protections for cyclists and pedestrians are fewer than we find in neighboring cities like Oakland and Berkeley--which in turn discourages bicycling and walking and thereby encourages more use of cars. Other cities in the area are doing a much better job than Emeryville at making it safe to bike--San Francisco with its Vision Zero program, Oakland with its green bike lanes running right up to Emeryville's border at 40th Street. **3**

Like many others, I support residential and commercial development in Emeryville, but not at the cost of the safety and convenience of cyclists like myself. Let's see serious efforts in our city to make streets safer for cyclists and pedestrians, and only then let's consider new development like the Sherwin Williams project.

As conditions for approving new development, I would suggest at the very least a significant increase in enforcement of laws against speeding cars and running red lights and adding green bike lanes to selected streets in the areas affected most directly by the development. **4**

Will Leben
1007 41st St. #133
Emeryville 94608-3773
510.842.1134

COMMENTER C1

Will Leben
January 25, 2016

Response C1-1: The commenter's opinion regarding the effects of the project on bicycle boulevards is noted. This comment does not relate to the adequacy of the information or analysis within the Draft EIR; therefore, no further response is required.

Response C1-2: The commenter's opinions regarding bicycle and pedestrian safety and speeding cars is noted. This comment does not relate to the adequacy of the information or analysis within the Draft EIR; therefore, no further response is required.

Response C1-3: The commenter's opinion regarding the level of protections in Emeryville for bicyclists and pedestrians is noted. This comment does not relate to the adequacy of the information or analysis within the Draft EIR; therefore, no further response is required.

Response C1-4: The commenter's request for more law enforcement for speeding cars and adding bicycle facilities is noted. This comment does not relate to the adequacy of the information or analysis within the Draft EIR; therefore, no further response is required.

Letter
C2

TO: City of Emeryville- Planning and Building Department ATTN: Miroo Desai
1333 Park Avenue
Emeryville, CA 94608

RICHARD D. AMBRO, Ph.D. COMMENTS OF FIRST DRAFT OF THE PROPOSED SHERWIN WILLIAMS PROJECT (EMERYVILLE) EIR RE: CULTURAL RES-OURCES:

I am retired professional archaeologist and long-time resident of Emeryville, with documented research interests and concerns for archaeological cultural resources in our community. I am neither a neighbor of the proposed project or a bicyclist. Let me begin by stating that professionally, I hold no opinion in support or against the proposed Sherwin Williams Project, other than my concerns regarding discovery and treatment of prehistoric and historical archaeological resources. 1

I have reviewed the First Draft of the Project EIR prepared by or under the supervision of LSA of Point Point Richmond, CA. I frankly find the document disappointing, uninformative and vague, perhaps even evasive, concerning the possibility of encountering and impacting significant prehistoric and historical archaeological resources. As such, the 1st Draft EIR is inadequate with regard to Protecting significant archaeological resources. It certainly would not inform the future Project archaeologist or archaeological monitor, or fully inform Project planners concerning the cultural resources, and measures proposed to avoid or mitigate Project-related impacts to any archaeological resources present. Although CEQA does not mandate pre-construction testing, I am not sure how monitoring alone, can assure proper identification and adequate mitigation of significant archaeological resources- without delays in construction schedule- to reduce impacts to less than significant (LTS) (Table II-I)? Perhaps it would be more truthful to discuss how adequate mitigation of archaeological resources may result in protracted delays or re-ordering of construction schedules, and unanticipated additional costs to the Project. 2

I focused on the Cultural Resources sections of the draft EIR, and found the prehistoric background sections inadequate to prepare archaeologists and planners to truly fully understand the character of Emeryville's archaeological record and history, or to adequately evaluate any archaeological finds encountered in the Sherwin Williams Project area. Instead of asking for minor revisions to the draft EIR, I ask for and recommend that a fuller, more detailed account of the prehistoric archaeology- including the nearby Emeryville Shellmound (CA-ALA-309). I Also request a fuller and more detailed discussion of the occupation and use of the Project Area in the Contact \Mission Period, and Post-Mission and Gold Rush Periods in the Project Area and Emeryville in the proposed Archaeological Monitoring Plan. Special attention should be paid to the fact that the Project Area and adjacent areas were briefly held by the Mission Dolores. It is to be recalled that the mouth of Temescal Creek was part of the Embarcadero de Temescal used as a landing for boats and a slaughtering area owned by the Peralta family. On moonlit nights, Vicente Peralta's vaqueros would ride down along Temescal Creek to chase and lasso Grizzly Bears for sport. 3

I recommend preparation of an Archaeological Research Design with a Research Questions and a Data Collection Plan with data requirements listed to adequately address each question to guide the archaeologist and archaeological monitors. I encourage using water-screening to maximize data recovery in evaluation and mitigation procedures, fully aware that water screening imposes certain practical challenges. 4

The detailed overview will assist the archaeologist in formulating field procedures, and to recognize and assess resource significance and guide supervisors or archaeological monitors in the field and laboratory. The Sherwin Williams Project literally and intellectually in the shadow of the nearby Emeryville Shellmound. Nearby but now lost prehistoric sites along Temescal Creek raise significant questions not directly addressed by archaeological finds at CA-ALA-309. I cannot state strongly enough how important and significant intact or even scattered disturbed remnants of these lost sites are to the fuller understanding of East Bay prehistory. I can offer a few to illustrate my point. What chronological, adaptive, seasonal, or social-political factors account for so many sites along Temescal Creek so close to a large settlement at CA-ALA-309? Do some not contain human burials or human remains? As the uppermost portions of the Emeryville Shellmound were destroyed when Shellmound Park was built, do these other sites offer evidence of European contact, Mission or post-Mission occupation? As I said, even disturbed remnants of these sites can address some of these questions- even a single glass trade bead or steel-drilled shell bead of Native type, or fragment(s) of obsidian that can be source and subjected to obsidian hydration dating. A diffuse Mission Period shell midden has been identified at Mission Dolores with such beads and obsidian hydration dates confirming the date of the occupation (Ambro et al. 2003). Polly Bickel and Erlandson raised the issue of changing sea levels for California Archaeology (Bickel 1978, Erlandson 1965). During the Pleistocene, sea levels were some 15-20 m lower than modern conditions (Bickel 1978, (Bickel 1978, Erlandson 1985). San Francisco Bay would have been a broad valley, through which the Sacramento River and its tributaries would have flown to exit the Golden Gate. As the glacial ice melted, sea levels began to rise, inundating much of the previously exposed coastal areas and sites. What would have been the effects of these changes on the inhabitants of the Project Area and and its vicinity? **4 cont.**

As Temescal Creek was a major permanent source of fresh water in the past and which frequently overflowed its banks in Historic Times, as noted in the Draft EIR (p. 328), it is recommended that the proposed Archaeological Monitoring Plan include a careful review of previous boring logs to identify evidence of potential buried non-shell midden prehistoric occupation, and older land surfaces. The utility of such review relates to recommendations concerning deep impacts to soils detailed below.
In the event fossils of large mammals are encountered within the Project Area, the archaeologist and paleontologist should examine the find(s) for evidence of hunting or butchering by paleo-hunters. Any such deeply buried paleo-Indian remains would be covered by procedures dictated by California Law in conjunction with Native American concerns by the MLD (Most Likely Descendant) as explained in the Draft EIR. The proposed Archaeological \Overview should include reference to deeply buried human remains in San Francisco, and deeply buried prehistoric artifacts in the San Jose Area. **5**

Although no MLD has been appointed (?), it would be interesting to the Archaeological Community to propose a survey of opinions among extant Ohlones on the list of approved MLDs regarding their opinions and preferences for treatment of human remains or burials. These are likely to range from cooperation, permit analysis of the remains and grave goods, with controlled reburial, to no disturbance at all or reburial on site. These options should be discussed and considered in posing project alternatives or flexibility of design. **6**

Engineering Threats to Archaeological Cultural Resources.
Soils Remediation for engineering purposes may impact Cultural Resources, and these should be archaeologically monitored. In particular, where required, expansive soils might be excavated and replaced and presumably compacted with appropriate materials. These areas should be archaeologically monitored before compaction. **7**

Piles: Potential Impacts to Deeply Buried Archaeological Resources.
Note: the depth of proposed piles are nowhere listed or discussed in the Draft EIR **8**

As discussed in the Draft EIR, piles may support structures in the various options posed for consideration. These may not necessarily result in entirely unavoidable impacts to any buried archaeological resources, unless driven in place without investigative / mitigative measures. Unless the Project Soil or geology totally preclude such measures, pre-driving augering or column core sampling could be employed to mitigate the impacts to any buried cultural resources. These would be monitored or examined and interpreted by the archaeologist and geologist. Any deeply buried cultural resources be noted for the record and study in construction in the Far Future. If such testing include human remains, I would defer to the City of Emeryville and any MLD appointed or the Native American Heritage Commission, with regard how to proceed. **8 cont.**

Typically the test site would be backfilled with sterile sand or grouted where ground water contamination is a concern. **9**

POSSIBLE ON-GOING TOXICS TESTING AND REMEDIATION
I (Ambro) have only recently heard that additional toxics have been identified on the parcel that is City-Owned. Does this suggest that testing for toxic deposits is not yet complete, and still underway? Will testing and any required remediation take place before the proposed archaeological monitoring plan is completed and implemented? As one of the recommendations will be for the archaeologist to review past boring logs for evidence of old buried ground surfaces and non-shell midden cultural remains, would it not it be prudent to archaeologically monitor these borings now? **10**

GRAPHICS:
Whereas the general quality of graphics and maps in the Draft is satisfactory, several of those prepared to accompany the cultural resources section are inadequate or lacking.. Desperately needed is a map showing the Project Area and adjacent areas, and where prehistoric archaeological resources have been found. This map (now lacking) should include the location of the Emeryville Shellmound (CA-ALA-309) and the locations of prehistoric archaeological sites and finds- in particular those found in the Bay Street Project Area (CA-ALA-310). The requested map should include those found found during monitoring of construction the Chiron now Novartis Building along Hollis Street (see William Self Associates 2002) alluded to in the Draft EIR). It should also spot the very recent finds of human remains/ or burial by Emeryville Public Works Department. These latest finds were identified in testing for footings of the anticipated foot bridge over the railroad tracks (please ask Mr. Maurice Kaufman of Emeryville Public Works). Of great utility and interest would be inclusion of the superimposed corrected locations, perhaps in red, based on Buss 1982 of the lost prehistoric sites CA-ALA-310, -311, 312, and -313 perhaps in red on the composite map. I am particularly struck by a map prepared in 2002 by William Self Associates that shows recent finds of burials and human remains within and relative to the now-completed Bay |Street Project buildings (William Self Associates 2002). [I (Ambro). I would gladly make a copy of the map in question available to LSA upon request. This map, or similar maps derived from URS, could be merged with the other finds or records, would more accurately illustrate why the archaeological and hopefully Ohlone Community, are concerned about the proposed project. **11**

Any professional reluctance to employ such data in the EIR would be assuaged by the fact that copies of the map prepared by William Self Associates are in wide public distribution by action groups seeking to preserve all SF Bay shellmounds. The map could be restricted on a need-to-know basis, if necessary.

FIGURE IV-J-3 shows the location of the Project Area Area in 1856, when the landscape and coastline were little changed from its natural pre-Columbian conditions. This map shows how few were the structures and other evidence of European occupation, as well as the locations of one or more large prehistoric shellmounds. The portions of the map that shows the vicinity of the Project Area should be enlarged and inset in the same map to better display details such as shellmound(s), historic structures, and fence lines for reference. The prehistoric shellmound(s) should be labeled as such. **12**

It is well documented that the modern mouth of the creek has been alterred from its 1856 location. Please show the necessary corrections on the map, and the reviewer concedes that the EIR does allude to the change to the course of Temescal Creek that occurred with the later construction of the Oakland Trotting Park (FIGURE .IV.J-4). Were any other changes made since? **13**

MAP 41
This map should have a larger, more legible legend and explanatory key. **14**

MAP 41
supposedly documents the location of groundwater wells, the extent and depth of toxics remediation, installation of "vadose zone confirmation sample locations", of "hot spot" remediation excavations, remediation trench features, and utility trenches. Are we to assume that no other major areas of ground disturbances occurred? What about areas disturbed by removal of buildings by Sherwin-Williams before turning over the land to development? Typically demolition and backfilling results in extensive leveling and ground surface disturbance. These areas should be indicated and described too. **15**

If you or your consultants have any questions or require additional information, etc, please feel free to contact me. Thank you for the opportunity to review and comments on the Draft EIR.

Sincerely,
Richard D. Ambro, Ph.D., Retired Consulting Archaeologist,
1264 64th St
Emeryville, CA 94608
510) 655-7951 richardambro@mail.com

BIBLIOGRAPHY:
Ambro, Richard D.; Nancy Valente, Jane Russell, Julia Costello, David Bieling, Thad Van Buren, and Kevin Havener
2003 They Danced in the Plaza: The Historical Archaeology of Notre Dame Plaza, Mission San Francisco de Asis (Dolores), 347 Dolores Street, San Francisco, California. Report prepared for Barbara Gualco Mercy/ Charities Housing California, San Francisco, by Holman & Associates, San Francisco.
Bickel, Polly McW.
1988 Changing Sea Levels along the California Coast: Anthropological Implications. Journal of California Anthropology 5(1):6-20).
Buss, Margaret
1982 Archaeological Survey Report for Proposed High Occupancy Vehicle Lanes from Bay Bride to Carquinez Bridge. California Department of Transportation, Oakland.
Erlandson, J. M.
1985 Early Holocene Settlement and Subsistence in Relation to Coastal Paleogeography: Evidence from CA-SBA-1807. Journal of California and Great Basin Anthropology 7(1):105-119.
William Self Associates
2002 Report on Archaeological Monitoring at the Chiron Campus Expansion Building12A Parking Structure, Emeryville, CA. William Self Associates, Orinda, CA.
2002 [Map of] Burial locations densities in Block 2 of the Bay Street Emeryville project. Map prepared by William Self Associates, April 12, 2002 from the Site Reference Lease Plan 7/6/01.

COMMENTER C2

Richard D. Ambro, Phd
January 27, 2016

Response C2-1: This comment, which briefly describes the commenter's background and states neither opposition nor support for the project, is noted. This comment does not relate to the adequacy of the information or analysis within the Draft EIR; therefore, no further response is required.

Response C2-2: This comment expresses disappointment with the Draft EIR's analysis of impacts to archaeological deposits. Furthermore, the comment questions "how archaeological monitoring alone, can assure proper identification and adequate mitigation of significant archaeological resources without delays in construction schedule to reduce impacts to less that significant."

The Draft EIR mitigation for impacts to archaeological deposits is not limited to monitoring. Mitigation Measure CULT-2 requires preparation of an Archaeological Monitoring and Evaluation Plan (AMEP) as a condition of project approval to ensure that, if significant archaeological deposits are discovered during construction, these are evaluated, and appropriately treated through implementation of a pre-established research design and field evaluation strategy, consistent with the requirements of CEQA Guidelines §15126.4 (b)(3)(C). This approach is consistent with previous mitigation measures proposed for the project site by William Self Associates in 2003 for soil remediation excavations (now complete) at the Sherwin Williams parcel. The commenter speculates that post-review discoveries could cause potential delays that could be avoided with "pre-construction testing." The identification of impacts to archeological resources and feasible mitigation measures in the Draft EIR are appropriate for the project and would reduce impacts to a less-than-significant level.

Response C2-3: This comment, which requests a "fuller, more detailed account" of the prehistoric and historical settings presented in the Draft EIR, is noted. This comment does not provide specific new information, or data not already considered in the Draft EIR that would inform the impacts analysis and appropriate mitigation measures. Note too that the AMEP (see Mitigation Measure CULT-2) would require a more detailed discussion of the appropriate evaluation contexts for post-review discovery of archaeological deposits.

Response C2-4: This comment recommends preparation of an Archaeological Research Design with a Research Questions and a Data Collection Plan. The comment suggests the inclusion of data recovery methods (e.g., water screening of soils) and relevant research questions for evaluating archaeological deposits at the project site. This comment does not relate to the adequacy of the

information or analysis within the Draft EIR, therefore, no further response is required. The AMEP required for the project (see Mitigation Measure CULT-2) would address appropriate recovery methods and evaluation contexts for post-review discoveries.

Response C2-5: This comment: (1) recommends that the AMEP include a careful review of previous boring logs to identify evidence of potential buried non-shell midden prehistoric occupation, and older land surfaces; (2) mentions that "deeply buried [P]aleo-Indian remains would be covered by procedures dictated by California Law;" and (3) requests that the "proposed Archaeo-logical\Overview should include reference to deeply buried human remains in San Francisco, and deeply buried prehistoric artifacts in the San Jose Area." The comment is noted. This comment does not relate to the adequacy of the information or analysis within the Draft EIR.

Response C2-6: This comment remarks that "it would be interesting to the Archaeological Community to propose a survey of opinions among extant Ohlones on the list of approved MLDs regarding their opinions and preferences for treatment of human remains or burials." This comment does not relate to the adequacy of the information or analysis within the Draft EIR, therefore.

Response C2-7: This comment requests that soils remediation be archaeologically monitored. Further soil remediation is not a component of the current project, and all cleanup activities (and documentation thereof) have been and will continue to be overseen by the DTSC (see Letter A4). This Draft EIR evaluates the Sherwin-Williams Development Project. Previous soil remediation on the Sherwin-Williams parcel was subject to a previous CEQA review and included archaeological monitoring of remediation excavations to approximately 20 feet below the ground surface. No significant archaeological deposits were identified during those monitoring activities.

Response C2-8: See Master Response 1 regarding the information needed to be in a project description. This comment notes that the depth of proposed piles are not listed or discussed in the Draft EIR, and notes that "pre-driving augering or column core sampling could be employed." Piles are not proposed for this project. The proposal is to install drilled displacement columns (DDC) in combination with shallow spread footings. The DDC columns will be 24 inches in diameter and will range in depth from 25 feet to 30 feet and will generate minimal spoils. The overall foundation systems will not result in any additional exporting of soils.

Response C2-9: This comment notes that "the test site would be backfilled with sterile sand or grouted where ground water contamination is a concern." This comment does not relate to the adequacy of the Draft EIR, therefore, no further response is required.

Response C2-10: The commenter notes that he has only recently heard that additional toxics have been identified on the City-owned parcel. Soil remediation was completed for this parcel in 2008 and is not part of the current project under CEQA review. Please see Response A4-4.

Response C2-11: This comment notes that the quality of graphics and maps in the Draft EIR is unsatisfactory and requests a map indicating locations of archaeological finds and sites in the vicinity of the project site. The City does not support public distribution of such a map; release of archaeological site location information may be withheld from the public pursuant to CEQA Guidelines Section 15120(d). Furthermore, the California Historical Resources Information System, an affiliate of the California Office of Historic Preservation, strongly discourages the public release of archaeological site location information.

Response C2-12: This comment remarks on Figure IV.J-3 and requests modifications to the figure, including enlargement of the graphic and the addition of labels to identify the nearby shellmounds. See Response C2-11. This comment requests changes to the Draft EIR that do not relate to the adequacy of the analysis, therefore, no further response is required.

Response C2-13: This comment notes that the mouth of Temescal Creek has been altered from its 1856 location. This comment does not relate to the adequacy of the Draft EIR; therefore, no further response is required.

Response C2-14: The request for changes in the graphic style of Figure IV.J-4 is noted; however the graphic is adequate in regards to the information being shown and these changes are not necessary to the analysis contained in the Draft EIR. This comment does not relate to the adequacy of the information or analysis within the Figure and no further response is required.

Response C2-15: This comment contains questions to the City regarding historical conditions on the site prior to removal of buildings and remediation of soils. The Draft EIR evaluates the proposed project against the conditions present at the time of the Notice of Preparation. For information on pre-remediation site conditions, please see the remediation documents referenced in Section IV.I, Hazards and Hazardous Materials. Please also see Response C2-7.

Letter C3

From: Greg Harper <GHARPER@actransit.org>
Sent: Sunday, March 06, 2016 3:35 PM
To: Miroo Desai
Cc: Dianne Martinez; Scott Donahue; Nathan Landau; Michael Hursh; H. E. Christian (Chris) Peeples
Subject: Comment on Sherwin-Williams Proposed Mixed Use Project Draft EIR

Dear Ms. Desai,

It is hard to believe that in the inter-urban Bay Area of the 21st century, as dense as Emeryville has rightfully become and wants to accentuate in the future, a draft EIR could be circulated with a vehicle-trip-only transportation analysis. The only mitigation measures posited are those of 20th century roadway improvements which supposedly will better accommodate their additional vehicles. **1**

Between AC Transit and the Emery-Go-Round, this location has good transit service that is planned to be even better, but the project sponsor proposes nothing to encourage its residents and patrons to use transit. For the past 5-10 years Berkeley, Oakland, and Alameda have required such measures, for residential projects of much less size consequence. For AC Transit, the major way this is being done is in requiring developers to insure that all of the residents have pre-paid passes. The two most well-known of these programs is Cal's Bear Pass program and Berkeley's employee pass program, but a number of residential developers have adopted them as well. If the units are condos, the HOA's implement the cost. The plans are tailored via the "Clipper Card"; AC Transit works with each developer to determine the most convenient and effective plan. The price of the passes per resident is small as AC is aware that not every resident will utilize the pass; and it can afford to promote the program as the marginal cost to AC of underestimating resulting ridership is small.

Already most local riders, and almost all trans-bay riders use the Clipper Card. Although the current version of the Clipper Card is satisfactory for data tracking and minimizing misuse, by the time this project receives its first certificate of occupancy, Clipper 2 will be in place which will provide much more data and be tailorable for prepayment by multiple sponsors; not just for employers and residents, but multiple-benefit packagers such as Amazon Prime, and event sponsors such as the Oracle Arena. For most riders, Clipper 2 will not be a separate card but be embedded in their cell phone software much as Square and Apple Pay is now. Riders might belong to several pre-paid providers who might share the fare of a given trip. **2**

Thanks to the City's foresight, Emery-Go-Round is fully taxpayer financed, but Emery-Go-Round is primarily a BART collector; and BART is already over-capacity, its costly infrastructure deteriorating. MTC is asking AC Transit to implement a great deal more peak-hours trans-bay service to alleviate this critical problem over the next 20 years. This is being done through AC's Measure BB funded service expansion plan and the construction of the San Francisco's new Transbay Terminal by the Transbay Joint Powers Agency.

The Draft EIR should include a Clipper based mitigation measure that the Project Sponsor has developed with AC Transit. The measure should be generic enough not only to address current Clipper Card capacities, but those of the future, most of which will lessen the cost to the Sponsor. This comment is not meant to minimize other vehicle-eliminating rather than vehicle-accommodating measures which could have been included as mitigation measures, but only to highlight the one with which I am most familiar. **3**

Thank you for your attention, and anticipated response.

Yours,

Greg Harper
Resident: Emeryville Artists Cooperative
Elected Representative for Berkeley, Emeryville, Piedmont and Oakland to the AC Transit Board
Chairman of the Transbay Joint Powers Agency, San Francisco.

COMMENTER C3
Greg Harper
March 6, 2016

Response C3-1: The transportation analysis, included in Section IV.C, Transportation and Circulation, also identified impacts to bicycle boulevards, increases in conflicts for bicyclist and pedestrians on the 45th Street bicycle boulevard, and transit vehicle delays.

Response C3-2: This comment describes various transit services within the area, but does not address any analysis or information contained within the Draft EIR; no further response is required. Please note that the City will require the project applicant to implement a transportation demand management (TDM) plan (see also Letter C15 that provides a draft plan), and will be required to monitor the effectiveness of that TDM Plan. As the project approvals progress through the public hearing process, the Planning Commission and City Council will have the opportunity to review and refine the project mitigation measures.

Response C3-3: The commenter's opinion that a "Clipper based mitigation measure" should be included is noted. This comment does not relate to the adequacy of the information or analysis within the Draft EIR; therefore, no further response is required.

Laura McCamy
5514 Doyle Street, #10 Emeryville, CA 94608
cell (510) 214-6156
lmccamy9@gmail.com

Letter
C4

March 7, 2016

Via email

Miroo Desai
City of Emeryville
1333 Park Avenue
Emeryville, CA 94608
mdesai@emeryville.org

Re: Comments on DEIR for Sherwin-Williams project

Dear Ms. Desai,

I am a resident of Emeryville and a property owner here since 2004. I am a current member and past chair of the Emeryville Bicycle and Pedestrian Advisory Committee (BPAC). I am a daily bicycle commuter. I commute by bicycle via Horton Street near the proposed project several times per week. This comment letter reflects my own opinions, not those of the BPAC.

While I am not opposed to the Sherwin-Williams project and I appreciate the developers' intentention to build the project to LEED ND Silver standards, I believe the Sherwin Williams DEIR is deficient in several respects that will lead to negative impacts on Emeryville. 1

Transportation: Level of Service is Cannot Be a Proxy for Quality of Service

The DEIR states: "For this assessment, levels of service are provided as information and a "proxy" for evaluating the transportation experience for vehicles, transit, and bicyclists and to guide the development of the transportation system in the project vicinity while balancing the variety of travel modes in the area."[1]

Yet the General Plan states: "The City does not recognize "Level of Service" (LOS) as a valid measure of overall transportation operations…. LOS **shall** not be used to measure transportation performance in environmental review documents or for any other purpose unless it is mandated by another agency over which the City has no jurisdiction (such as Caltrans, Berkeley, Oakland, and the Congestion Management Agency), and then it shall only be used for the purposes mandated by that agency."[2] 2

[1] Sherwin-Williams DEIR ("DEIR"), p. 102.
[2] General Plan Policy T-P-3, cited in DEIR, p. 128 (emphasis added).

The General Plan does not give an option to use LOS as a "proxy" for quality of service ("QOS"), nor should it. Policy T-P-3 rightly mandates QOS as the optimal way to measure the roadway experience of all users. **2 cont.**

LOS as used in this DEIR considers only delay times for vehicular traffic. While vehicle delay times may have some bearing on the efficacy of public transportation, it has no little or no bearing on the experience of pedestrians and bicyclists.

The failure to accurately and adequately measure bicyclists experience is particularly egregious in this instance because the area studied includes three bicycle boulevards, streets on which bicycle traffic is meant to have priority. **3**

Guidance on the factors to take into consideration when planning traffic patterns on multimodal public streets are widely available.[3]

Some of the factors to consider when planning multimodal streets for walkability include: size and location of obstructions on the sidewalk; circulation area, length of signal phases for pedestrians; and space and buffering from traffic.[4]

Some of the factors that determine whether streets are inviting to bicyclists include: the length of detour necessary to reach a safe bicycle route, width of the roadway and space available for bicycles, and traffic speeds.[5] **4**

The length of delay of motor vehicles is not an acceptible proxy for the factors that make a street walkable or bike friendly. In fact, a better LOS for cars may negatively impact alternative transportation modes if it leads to increased traffic volumes and speeds. **5**

---

[3] *See* NCHRP Report 616, Multimodal Level of Service Analysis for Urban Streets, Transportation Research Board, National Academies of Science (2008), *available at:* http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_616.pdf; State of Florida Department of Transportation 2013 Quality/Level of Service Handbook (2013), *available at:* http://www.dot.state.fl.us/planning/systems/programs/SM/los/pdfs/2013%20QLOS%20Handbook.pdf. *See also* multi-modal level of service tools outlined at http://www.fehrandpeers.com/losplus/.

[4] Fehr and Peers, Multi-Modal Level of Service Toolkit HCM 2010 – Pedestrian LOS (2010), *available at:* http://asap.fehrandpeers.com/wp-content/uploads/2014/08/MMLOS-Tool-HCM-2010-Pedestrian.pdf.

[5] Maaza Mekuria et al., Mineta Transportation Institute, Low-Stress Bicycling and Network Connectivity (May 2012), *available at:* http://transweb.sjsu.edu/PDFs/research/1005-low-stress-bicycling-network-connectivity.pdf.

Transportation: A Traffic Signal on 45th Street May Harm Bicyclists and Pedestrians

Mitigation measure TRANS-1d calls for the installation of a traffic light at 45th and Hollis Streets, where there is currently a 4-way stop. Traffic signals, by design, prioritize cars over walkers and bicyclists. At a stop sign, pedestrians have the right of way immediately. With the installation of a traffic signal, pedestrians will have increased wait times.

If the traffic signal, like others in Emeryville, defaults to green on Hollis unless the signal is triggered by traffic on 45th, this will diminish the quality of this roadway segment for bicycles. Signal detectors are designed to detect cars; they often fail to detect bicycles and they may require bicyclists to stop in the center of the roadway to be detected. 6

In the discussion of the mitigation, the DEIR states that installation of this traffic signal would "provide a protected crossing for bicyclists and pedestrians." This is nonsense. The mitigation states that this light will be linked to the signal at Hollis and Park Streets. This traffic signal will facilitate the speedy movement of cars. It will lead to faster vehicular traffic.

A traffic signal at 45th and Hollis is in no way a bicycle and pedestrian mitigation measure. An alternate mitigation should be developed for the increased traffic on 45th Street. The parallel bikeway option discussed in the TRANS-2 impacts section (DEIR, p. 160) is not an alternative worth considering for this impact. Emeryville is a small city with many obstructions and dead ends. There is no parallel aternative.

Transportation: Vague Mitigation is No Mitigation

TRANS-2 and TRANS-3 mitigations state, in part, "Work with City Staff to identify additional bicycle boulevard treatments that could be installed" along 45th and 53rd Street. Mitigation measures should be specific. The vagueness of this statement makes these mitigations so ephemeral as to be no mitigation at all. 7

Greenhouse Gases: Finding of No Significant Impact Fails to Consider All Planned Development

While the DEIR found no significant impact on greenhouse gases from this one project, it must consider the cumulative impact of multiple projects in the City of Emeryville and throughout the State of California. Thousands of small projects with findings of no significant impact on climate change could, cumulatively, lead to the demise of the goals of AB 32 and of Emeryville's Climate Action Plan. 8

The Sherwin Williams project and all new projects in Emeryville should be required to install solar panels and pipe in greywater from the nearby EBMUD facility. We 9

Letter C4 *Cont.*

can't afford to let any opportunities to develop local, alternative energy sources pass us by.

9 cont.

I hope the Final EIR for this project will include significant changes and improvements in the mitigation measures it requires. The residents of Emeryville will live with the impacts of this project for years to come.

Very truly yours,

Laura McCamy

COMMENTER C4

Laura McCamy
March 7, 2016

Response C4-1: This comment is introductory in nature. While the comment does include the phrase "…I believe the Sherwin Williams Draft EIR is deficient in several response that will lead to negative impacts on Emeryville," no specific deficiencies are noted, and no additional information or analysis is provided to which specific responses can be made.

Response C4-2: As noted in the Draft EIR, automobile level of service was not assessed as a CEQA metric but intersection levels of service were evaluated to determine if there are recommended improvements to the transportation system that would enhance mobility for vehicle traffic, including transit vehicles, which would not result in secondary impacts to other modes of travel.

Response C4-3: Significance criteria for transit operations, bicycle, and pedestrian facilities are discussed starting on page 115 of the Draft EIR. Project impacts to these modes of travel were identified based on the significance criteria, and as noted in the comment, impacts and mitigation measures were developed.

The City has not yet adopted a procedure to evaluate quality of service or established significance criteria related to quality of service.

Response C4-4: The comments regarding guidance when planning traffic patterns on multimodal streets is noted. Please also see Response C4-2 and C4-3. This comment does not relate to the adequacy of the information or analysis within the Draft EIR; therefore, no further response is required.

Response C4-5: The comments regarding LOS and walkable and bike friendly streets are noted. This comment does not relate to the adequacy of the information or analysis within the Draft EIR; therefore, no further response is required.

Response C4-6: The potential for increased wait times for pedestrians with the installation of a traffic signal at the 45th Street at Hollis Street intersection should be balanced with decreased travel time for transit vehicles along the Hollis Street corridor, which serves Emery-go-Round. As Hollis Street is a designated transit street in the General Plan, General Plan guidance indicates that when there are competing travel modes, the designated mode takes priority. Installation of a traffic signal would decrease transit vehicle travel times along the corridor, especially during peak hours, making transit a more appealing option for some trips that might currently occur in a vehicle.

Bicycle detection would be provided at the intersection through video detection. The City plans to install video detection for bicyclists at all signalized intersections in the City of Emeryville.

Response C4-7: The City of Emeryville Pedestrian and Bicycle Plan identifies the provision of additional bicycle boulevard treatments on the 45th Street and 53rd Street corridors consistent with Mitigation Measures TRANS-2 and TRANS-3. The ultimate treatments to be constructed on these streets would be developed by the City as part of a public process.

Response C4-8: The determination of significant greenhouse gas impacts was based on the significance threshold adopted by the BAAQMD and the City of Emeryville. According to the BAAQMD, greenhouse gas emissions from individual projects contribute, on a cumulative basis, to the significant adverse environmental impact of global climate change. According to the BAAQMD, no single project would generate enough greenhouse gas emissions to noticeably change the global average temperature. The BAAQMD's approach to developing the Threshold of Significance for GHG, which was adopted by the City, was to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation on greenhouse gas reduction, including AB 32. According to the BAAQMD if a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant. See Appendix A to this RTC document for additional BAAQMD documentation supporting the Threshold of Significance's consistency with California legislation adopted to reduce statewide emissions.

Response C4-9: This comment refers to design components of the proposed project (i.e., the installation of solar panels and greywater systems), not the analysis within the Draft EIR. As noted on page 372 of the Draft EIR, all landscaping would be irrigated and plumbed with purple pipes for the use recycled of water.

Letter
C5

Ann Holsberry
Gary J. Grimm

1420 45th Street, #32
Emeryville, CA 94608
Telephone: (510) 848-4140
Facsimile: (510) 848-4164
Email: gjgrimm@mindspring.com

March 7, 2016

City of Emeryville
Planning & Building Dept.
Attn: Miroo Desai
1333 Park Ave.
Emeryville, CA 94608

Via email mdesai@ci.emeryville.ca.us; mdesai@emeryville.org
Hand Delivery

Re: Sherwin Williams Development Project draft EIR
Submission of Written Comments
SCH # 2004122083

Dear Ms. Desai;

These written comments are submitted in response to the City's Notice of Availability (NOA) of the Sherwin Williams Development Project Draft EIR (dEIR) dated January 7, 2016. These comments are submitted on behalf of Ann Holsberry and myself and are in addition to the comments I provided at the February 25, 2016 hearing on the dEIR before the Planning Commission. We previously provided a written response dated February 6, 2015 to the revised NOP. Please include these comments in the administrative record.

Ann and I are members of the 45th Street Artists' Coop at 1420 45th Street, immediately adjacent to the proposed Project. We are in full agreement with and support the written comments filed by Richard Grassetti of Grassetti Environmental Consulting on behalf of the 45th Street Artists' Cooperative (Coop). Ann has been working in her live/work painting studio at the Coop for about 30 years. The studio is an interior studio that has large single pane windows that are usually open during daylight hours in mild weather to increase natural light for her art work and to provide ventilation. This is critical to Ann's work as an artist. 1

We are very interested in having a project on the Sherwin Williams site that is a benefit to our community and the City of Emeryville, one that enhances the quality of life of our neighborhood. Unfortunately, due to the incompleteness of the environmental impact information that is presented in the dEIR, we are unable to tell and make meaningful comments on whether the proposed projects, or the alternatives reviewed, would be a benefit to our community. 2

Letter
C5
Cont.

Incompleteness of the dEIR

Our primary concern is with the inadequacy, incompleteness and lack of sufficient detail in the dEIR with respect to the project description, the analysis of environmental impacts, and the mitigation measures proposed, all of which are essential to an acceptable impact assessment. The document fails to fully consider City plans and policies, several of which were significantly revised during the dEIR preparation process. Consideration of these revisions cannot be omitted with respect to the environmental impact assessment. In addition, thresholds of significance of the environmental impacts are not provided in sufficient detail and cannot be deferred to later City approvals. A few of the specific inadequacies to which we refer are further referenced below. Mr. Grassetti's written comments on behalf of the Coop provide considerable detail (nearly 3 pages of examples) on how the dEIR fails to comply with City goals, policies, regulations, and programs. Without this detail as described, the document appears to be non-conforming with CEQA and the CEQA regulatory Guidelines. **2 cont.**

Hearing Procedure Concerns

Ann and I have concern with several issues relating to the February 25th Planning Commission hearing and an issue that follows from the Commission hearing. First, I found the 2 minute time limit on presentations frustrating when we were expecting a 3 minute limit as is the usual practice for the Commission and City Council meetings. This caused presentations to be unreasonably rushed, and much of the testimony had to be omitted which stifled public input and comment. This limitation seemed unreasonable for a project with the magnitude and impacts of the Sherwin-Williams project which will dramatically affect the lives of neighbors in the vicinity of the project as well as other residents of Emeryville. It should be noted that all speakers expressed concerns with the dEIR and none fully supported the document as written or the proposed project as described in the dEIR. **3**

Second, I was surprised at Charlie Bryant's response to Planning Commissioner questions on February 25 with respect to redrafting or recirculating the dEIR to more fully address the inadequacy of the document. Mr. Bryant's response indicated that redrafting/recirculating the document is not an alternative, but that any inadequacies would be addressed in the Response to Comments (RTCs). I disagree with that conclusion in that the Commission as the policy body for the City can direct that the document be redrafted and recirculated. It is an alternative. We believe that the new information referenced at the hearing, i.e. the affordable housing policy, density bonus requirements, etc. that was not considered in the dEIR is so significant as to warrant redrafting the dEIR and recirculation for additional public comment. Further, substantial new information has been presented since the January 8, 2016 NOA, primarily in the Commission hearing, to warrant redrafting and recirculation of the document, not simply responses in the RTCs. To not do so would deprive the community of a meaningful opportunity to comment. **4**

Third, in response to a Commissioner question to Mr. Bryant on February 25 specifically about the changing City policies that were not considered during the drafting of the dEIR, Mr. Bryant indicated that the question is difficult to answer and referenced certain traffic study issues. He also indicated that that prior rules didn't require affordable housing. Consideration of this project **5**

must consider current policies, not those no longer in effect. To even suggest "grandfathering" this project based on policies that no longer apply, and to conclude that current rules might not apply, would be a travesty of justice to the Emeryville community. The impacts of this project will be major, and they must be considered in the context of current policies and regulations. **5 cont.**

Fourth, in response to Commissioner questions to Mr. Bryant on February 25 about the level of detail required in the dEIR for the Sherwin Williams project, Mr. Bryant responded that as this is a PUD, the analysis with be on the largest level and that it is a "high level document" unlike more specific unit design documents. While it not clear what was specifically meant by this response in terms of the details of this project dEIR, it must not be an excuse for the lack in this dEIR of a rigorous and careful analysis and assessment of the environmental impacts of this project, both from the lengthy construction period and in the long term as required by CEQA. **6**

Fifth, It is my understanding that the usual practice of the City with respect to EIRs is to prepare a Response to Comments document (RTC) for the oral and written comments, and then to schedule a hearing before the Planning Commission for consideration of the adequacy of the Final EIR. The standard practice has been to make the RTC available to the Commissioners and the public a week before the hearing. However, for this Sherwin Williams PUD project, it appears that a one week lead time before the hearing would be inadequate given the size of the project, the numerous issues that undoubtedly will have to be addressed in the RTCs or redrafted document, and the significance of the environmental issues that have been presented. It's my understanding that this is one of the largest housing development projects that has been proposed in Emeryville. To have only a one week period to consider the RTCs and prepare for hearing, would deprive the Commissioners and the public of the time that is needed to carefully review the relevant document, present informed testimony, and may not allow the Commissioners adequate time to make a carefully considered decision. I strongly urge the City to provide a considerably longer lead time between the time the RTCs are made available and the hearing date. **7**

Noise Impacts

The dEIR fails to adequately assess and address significant noise related environmental impacts that will occur, and fails to identify detailed and meaningful mitigation measures to address the noise impacts both during construction and long-term. Existing ambient levels, existing traffic noise levels, existing rail noise levels and construction related noise levels must all be considered, both inside and outside of the project area. It should be noted that the Table IV.F-4 dBA short term ambient noise levels (average and maximum) were highest at monitoring station ST-1, at the corner of Horton and 45th Street, right next to the Coop live/work residences. The only long term noise monitoring location was within the project boundaries, with none outside the project. Long term noise monitoring should also be conducted outside the project boundaries as part of the environmental impact analysis. **8**

Impact NOI-1 concluded that implementation of the project could result in exposure of future residents of the project to excessive noise levels, a Significant Impact (SI). Noise level monitoring results are provided only for an area just east of the railroad tracks within the project area and existing noise levels in the project - no noise monitoring was done east of Horton Street. **9**

There was no analysis under this impact with respect to overall noise levels to live/work sensitive use areas east of the project, such as the Coop. This is a deficiency in the document. **9 cont.**

Due to the noise impacts to future on-site residents, a mitigation measure is proposed to provide an alternative form of ventilation to allow for windows to remain closed. However, this mitigation is deficient as it failed to address these same noise impacts to or mitigation measures for off-site sensitive uses. Furthermore, the mitigation measure does not quantify how and to what levels the alternative form of ventilation will reduce noise on-site to Less than Significant Levels (LTS). Further analysis must be done on this issue that would also include off-site receptors. **10**

Impact NOI-2 concludes that a substantial increase in stationary noise levels could result to off-site sensitive uses (including Coop live/work studios and others in the area) due to delivery and unloading activities, parking lot activities, and mechanical equipment, thus, a Significant Impact. However, this analysis also was not quantified as specific loading and unloading locations have not been established, and parking lot activities and mechanical equipment noise is nowhere discussed nor quantified. **11**

A mitigation measure is then proposed to incorporate standard noise control measures to reduce these impacts to Less Than Significant. However, no adequate quantification of the noise reduction that is anticipated from these noise reduction measures has been presented or discussed, and there is no factual basis to conclude that these measures will reduce off-site noise levels to LTS. Further analysis must be done on this issue.

Impact NOI-3 concludes that the project construction activities could cause a substantial temporary increase in ambient noise levels in the project vicinity due to grading, site preparation and building erection – a Significant Impact. In my February 6, 2015 NOP letter I requested that these impacts be thoroughly assessed. The dEIR analysis has the following shortcomings: **12**

- No specific foundation construction methods are specified. Foundation construction methods may make a major difference in noise levels and their timing;
- The document states that the project will be constructed over one continuous phases over "many months", but does not discuss the specific type of activities and it's duration that will occur over these many months;
- The use of "temporary" is misleading in that this will occur over a 36-48 month period, and perhaps longer. This is a real stretch of the "temporary" classification of this noise impact and does not seem very "temporary" to nearby live/work residences; and
- The document states that the nearest Coop units are 60 feet from the site, and the noise levels could range up to 89 dBA. This is very significant noise levels. These noise levels appear to be unacceptable under the City General Plan.

Another mitigation measure is proposed for these SIs. However, of the proposed standard methods referenced, only two of the measures are mandatory and designated as "shall" actions that would reduce noise, and many others that are suggested are "where feasible." There is no clear project commitment to these measures, and again no quantification or rational discussion of how these mitigation measures would reduce the impacts to LTS. Further, any excavation materials to be removed from the site and delivery of construction materials to the site by rail **13** **14**

was not assessed. This should be reviewed as this method for transportation of soils removed from the site was used during the cleanup of the site when DTSC conducted regulatory oversight of that project. If soils removed from the site during the prior site remediation was able to be transported out by rail, then it would seem that delivery of building construction materials should be considered for this anticipated construction project. **14 cont.**

Finally, the discussion of the cumulative noise impacts is insufficient – there is no adequately detailed discussion of the construction and ongoing noise impacts from the other approved, proposed, and projects that are currently under construction in the area, but it is done in a very summary manner. **15**

Air Quality Impacts

Table IV.D-4 on Air Quality Attainment Status notes the bay area is a "nonattainment" area under California standards for ozone and fine and course particulate matter, the main source for both is motor vehicles and construction activity. Thus, the air quality impacts relating especially to motor vehicles and construction activity should be very closely assessed. One of the commenters at the Commission hearing noted the detrimental air quality impacts to her from prior nearby construction activities on and related to this project site.

Impact Air -1 concludes that "short term" degradation may occur due to the release of particulate emissions generated by excavation, grading, hauling and other activities, and that emissions from construction vehicles/equipment may increase particulate matter and other air pollutants. This is a Significant Impact. **16**

The use of "short term", while less than permanent, is misleading in that a construction period of 3-4 or more years is very lengthy and significant to nearby live/work sensitive uses. As well as with noise impacts previously mentioned, short term air quality degradation is not very short-term if you live or work nearby. One of the commenters at the Commission hearing testified that during the site toxics remediation (which was relatively short compared to 3-4 years) the construct noise and dust made it impossible to be in her home at the Coop during parts of the remediation.

The dEIR notes that the impacts would be the greatest during the site preparation phase as most engine emissions are associated with excavation, handling, and transport of soils on the site, thus, finding a Significant Impact. However, the document fails to provide any specific description of the duration of excavation, handling, and transport period or when during the overall construction period it will occur. Further, the document provides little if any quantified analysis of this impact. This makes it impossible to adequately assess the impact and how the impacts may be addressed, reduced or eliminated. Further detail and analysis must be provided in this regard. **17**

The dEIR suggests that with the implementation of Mitigation Measure A-1, that the significant impacts can be reduced with mitigation to Less than Significant. However, these conclusions are not sufficiently supported in the document in the following respects: **18**

- No quantification of how, which specific air pollutants, and to what extent the mitigation measure would reduce the air quality impacts;
- No quantification is presented as to how implementation of BMPs would reduce annoying dust levels at downgradient properties to LTS;
- No consideration was given to possible use of rail transportation in connect with this aspect of the project – this potential mitigation measure should be considered;
- Little indication is provided of what monitoring would be done relating to the air impacts; and
- No consideration was given to ways and methods that the air impacts to nearby sensitive uses could be directly mitigated with those occupants.

18 cont.

The analysis in the dEIR of <u>long term air quality impacts</u> on sensitive receptors considers only project residents. Their time away from home is estimated at 70%. However, the long term impacts for nearby off-site sensitive uses was not considered, and the time away from home is dramatically lower for these residents due to the live/work nature of most of those uses. Nevertheless, even with future project residents being away from home 70% of the time, Mitigation Measure Air-2a is proposed to provide air ventilation and filtration systems to future residents and to provide disclosure. This makes ignoring the nearby live/work residents impacts from this analysis even more egregious in that these residents often have their windows open for better light and ventilation of their live/work units as they have stated at the Commission hearing. They will not have air filtration and air ventilation systems. The long term air quality impacts to nearby residents must be assessed and addressed in the dEIR to the same extent as project residents.

19

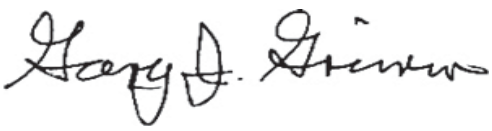
<u>Conclusion</u>

Ann and I urge the City to carefully consider these comments in the RTCs and/or to reissue the dEIR and reopen the public comment period. It is our hope that the revised document will provide the kind of detail that will enable us to better assess the construction related and long term impacts of this proposed project, and that this analysis will be one that will enable us to be more supportive of the project going forward.

20

Thank you for your consideration,

Sincerely,



Ann Holsberry
Gary Grimm

COMMENTER C5

Ann Holsberry and Gary Grimm
March 7, 2016

Response C5-1: All written comments submitted in response to the Notice of Preparation or the Draft EIR are part of the Administrative Record. Please see Responses D11-1 through D11-20 for responses to the oral comments made by the commenter at the February 25, 2016, public hearing on the Draft EIR.

The letter submitted by Richard Grassetti is identified as Letter B2 within this Response to Comments Document.

Response C5-2: This comment is largely introductory in nature. The commenter raises general concerns about "inadequacy, incompleteness, lack of sufficient detail in the Draft EIR with respect to the project description, the analysis of environment impacts, and the mitigation measures proposed…" Unfortunately, the commenter does not cite specific examples of these inadequacies, so no specific response can be provided.

Please see Master Response 1 for a discussion of information required to be included in an EIR Project Description. Please also see Master Response 2 and Responses B2-1 through B2-120 which provides responses to Letter B2.

Response C5-3: The comments related to hearing procedure concerns are noted, and as noted at the hearing, speakers were urged to provide comment letters. It is the City's policy to allow the Mayor and the Planning Commission (PC) Chair to limit public testimony time at his/her discretion to allow all parties wishing to speak the ability to do so. For example, the Mayor or the PC Chair may request that speakers limit their time at the podium or to refrain from repeating comments of past speakers. Additionally, CEQA Section 15202. (a) states that formal hearings at any stage of the environmental review process is note required and a lead agency may restrict public comments to written communications.)

Response C5-4: Please see Master Response 2 regarding the Development Bonus and Response B2-99 regarding recirculation of Draft EIRs.

Response C5-5: Chapter V, Planning Policy, of the Draft EIR provides a discussion of the proposed project's consistency with land use policy documents. As noted on page 439 of the Draft EIR, policy conflicts are not in and of themselves considered significant environmental impacts under CEQA unless they would result in physical environmental impacts. The comment provides no instances where a potential policy conflict would result in an environmental impact.

Response C5-6: The comments concerning Mr. Bryant and the level of detail in the Draft EIR are noted. In general, the City as Lead Agency and EIR authors disagree with the statement that there is a lack of rigorous and careful analysis and assessment of the environmental impacts of the project in the Draft EIR. The Draft EIR contains in depth descriptions and analysis of environmental topics on over 500 pages and five appendices of text, tables and figures.

Response C5-7: The comments are noted in regards to the City's standard processes for hearings on a Final EIR and the request for a longer review period of the RTC Document.

Response C5-8: Existing ambient noise levels in and around the project site are discussed on pages 251 through 256 of the Draft EIR. Ambient noise monitoring was conducted at five locations to determine existing noise levels. Long term noise monitoring at off-site locations was not necessary for purposes of establishing the ambient noise environment in the project vicinity. Long term noise monitoring was conducted on-site to determine the noise level in terms of CNEL required to assess if the project would meet interior noise standards. Any additional long-term noise monitoring was not necessary for CEQA purposes.

Response C5-9: Impact NOI-1 evaluates the ambient noise environment with respect to the noise land use compatibility of residential uses on the project site. Land use noise compatibility is only evaluated when proposing new noise sensitive uses. Impacts of the project generated noise to off-site land uses is discussed under Impact NOI-2 on page 262 of the Draft EIR.

Response C5-10: Mitigation Measure NOI-1 would be required to reduce interior noise levels for future residential units of the proposed project to less than significant levels. As noted under Response C5-9, the land use compatibility is evaluated at the time new construction or development is proposed (see Table IV.F-9: City of Emeryville Noise and Land Use Compatibility Standards). CEQA requires the evaluation of project related impacts to off-site land uses, which was done under Impact Noise-2 of the Draft EIR. The evaluation of existing noise source mitigation to reduce interior noise at off-site receptors should have been conducted at the time residential uses were permitted for the buildings.

Response C5-11: As specific loading areas are not proposed at this time, Mitigation Measure NOI-2 would require the final project design to meet the quantitative noise ordinance standard of 55 dBA during the night and 65 dBA during the day. Mitigation Measure NOI-2 would limit deliveries to the daytime hours. Noise levels could be reduced by 20 dBA with a distance of 500 feet. Other measures such as enclosures could also reduce noise levels by 20 dBA or more. The combination of measures needed to reduce noise levels would be dependent on the final location of the loading area. Implementation of

Mitigation Measure NOI-2 would reduce stationary noise impacts to a less than significant level.

Response C5-12: Specific foundation construction methods are unknown at this time. A specific development sequence plan for the project has also not yet been developed. Page 266 of the Draft EIR identifies potential construction equipment that would be used including earthmovers, loaders, graders and water trucks. The project site is 5 acres, therefore construction noise levels at any one off-site location would be limited to the construction phase of the building constructed closest to the receptor. The noise impacts associated with construction would be considered less than significant with adherence to the City's Noise Ordinance standards, which would be required with implementation of Mitigation Measure NOI-3. Both the City's Noise Ordinance and General Plan do not include a maximum noise level threshold for construction noise levels.

Response C5-13: As noted in Response C5-12, the City does not have a maximum noise level standard for construction impacts. Construction is only limited by the permissible hours of construction activities. Therefore, implementation of Mitigation Measure NOI-3, which would limit the construction hours to comply with the noise ordinance would reduce potential impacts to a less than significant level. Please see Response B1-7 for a discussion of the Mitigation Monitoring and Reporting Program.

Response C5-14: It is unknown at this time if particular construction materials would be available for delivery by rail. However, this construction activity would also be limited to the permissible hours and other restrictions established in Mitigation Measure NOI-3. Therefore, any noise associated with rail delivery would result in a less than significant impact.

Use of the adjacent railroad for delivery of materials or removal of soil is not proposed as part of the project; as such, it was not evaluated within the Draft EIR. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines Section 15204).

Response C5-15: The project analysis indicates that implementation of the project would result in less than significant impacts related to construction and operational noise. The City's noise ordinance would restrict the hours of construction for the proposed project and other projects proposed in the project area, resulting in a less than significant level. Additionally, due to the noise reduction attributable to distance, cumulative impacts would not be significant at the cumulative level.

Response C5-16: According to the BAAQMD, in developing thresholds of significance for air pollutants for project construction and operation, consideration was given to past and future development project contribution to the region's adverse air quality impact. The thresholds of significance for construction and operational-related criteria air pollutant precursor emissions represent the levels at which a project's individual emissions of criteria air pollutant or precursors would result in a cumulatively considerable contribution to the regions existing air quality conditions. Results of the project construction and operational analysis indicate the project would result in less-than-significant impacts and therefore would also result in a less-than-significant cumulative impact. The BAAQMD and the City do not distinguish between construction emissions that would be generated for specific duration periods.

Response C5-17: Page 209 of the Draft EIR describes the methodology used for determining construction emission impacts. As stated on page 209, the California Emissions Estimator (CalEEMod) model was used to quantify construction emissions. Detailed calculations by phase are shown in Appendix C of the Draft EIR. Results of the quantitative analysis of project construction emissions are shown in Table IV.D-5 and indicate that project construction emissions would result in a less-than-significant impact. Please also see Response B2-6.

Response C5-18: As shown in Table IV.D-5 of the Draft EIR, project construction emissions would not exceed the quantitative thresholds established by the BAAQMD and adopted by the City. The BAAQMD does not have a threshold for fugitive dust levels. The BAAQMD has determined that implementation of the basic construction Best Management Practices would reduce fugitive dust levels and annoyance from construction to a less than significant level.[9] Mitigation Measure AIR-1 would implement the BAAQMD's basic Best Management Practices, and would include additional measures to further reduce impacts. Quantification of emission is not provided in the text as the BAAQMD does not have a quantitative threshold for dust emissions. However, fugitive dust emissions are shown in the CalEEMod output files presented in Appendix C of the Draft EIR.

Response C5-19: Long-term operation of the project would not result in the generation of substantial emissions as shown in Table IV.D-6 of the Draft EIR. Additionally, the project would not be a source of toxic air contaminants. Therefore, project operation is not expected to result in the exposure of sensitive receptors to substantial pollutant concentrations. Mitigation Measure AIR-2a and AIR-2b would reduce exposure of substantial pollutant concentrations to future residents of the project site. However, the project would not result in an increase in health risk to off-site residential receptors.

[9] Ibid.

Therefore, the project would not be required to mitigate impacts from existing sources to existing receptors.

Response C5-20: Please see Responses B5-1 through B5-19.

Letter
C6

RECEIVED
MAR 07 2016
City of Emeryville
Planning Department

Comments on the Sherwin Williams DEIR
Brian Donahue

The Sherwin Williams project (SWP) as presented is in opposition to the General Plan in myriad ways that can be placed into various DEIR categories (for instance 'land use') including overlapping categories and no attempt to select the possible correct categories will be made here but deference will instead be shown to LSA Associates or the City of Emeryville to do that work.

Five distinct areas of General Plan protected exigencies are here thus presented:
1) The affordability of housing in Emeryville as a whole.
2) The rate of "family friendliness" in Emeryville as a whole.
3) The amount of park/open space land in Emeryville as a whole.
4) The amount of "locally serving, non-formula" retail in Emeryville as a whole.
5) The amount of home ownership in Emeryville as a whole.

1

Any reading of the General Plan will surmise these five areas are areas the people of Emeryville wish to protect. Each of the five can be quantified as they exist now and the assumption must be made that if the SWP can be shown to degrade any of the five areas, the SWP must be in violation of the General Plan. Ratios can be made between what we have now per resident for each of the five as compared to new ratios per resident as delivered by the SWP:

1) The SWP calls for no affordable housing and therefore the ratio of existing affordable to non affordable housing will be degraded toward Emeryville as a whole becoming less affordable; a violation of the General Plan.
2) Insofar as the SWP provides for housing, guarantees must be provided to fully observe the City of Emeryville's family friendly housing ordinance to protect the ratio of this kind of housing as exists.
3) The SWP calls for an amount of park acreage and an amount of new residents but the ratio of residents per acre proposed by the SWP is more than what exists in Emeryville in terms of residents per acre and therefore the ratio of existing park acreage will be degraded in Emeryville as a whole; a violation of the General Plan.
4) The SWP calls for no guarantee as far as retail is concerned and therefore the ratio of existing locally serving/non-formula retail to other retail will likely be degraded toward Emeryville as a whole becoming less locally serving in its retail with more formula retail; a violation of the General Plan. This assumption can be made because the cost of new construction has been shown to be prohibitive for retail lessors that are locally serving and non-formula.
5) The SWP is conceived to be a 100% rental housing project and as such the ratio of rental to ownership housing will be degraded toward Emeryville as a whole becoming a city with less home ownership; a violation of the General Plan.

2

In addition to these troublesome areas of non-conformity with the General Plan is the fact that as a Planned Unit Development (PUD) project, the SWP will present itself as such for observers, degrading the phycological feeling of the existing neighborhood of small parcel development with many different developers. It has been shown that this PUD exigency creates a sterile, stultifying effect often associated with suburban development. For the uninitiated, any

3

Letter
C6
Cont.

RECEIVED
MAR 07 2016
City of Emeryville
Planning Department

great city in the world can be referenced; the places people like to hang out in, to linger in, are not PUD developments. People like the feeling created by cities having grown organically with small parcels and many developers with different buildings. These kinds of places without PUDs have a genuine authentic feeling and the SWP will contribute to a loss of those feelings for the existing neighborhood. It is a simulacrum of place. I maintain this is quantifiable and take any claims to the contrary by LSA Associates as laziness, unimaginativeness or some other unacceptable avoidance of performing the necessary work here. **3 cont.**

Also, the visual aesthetics presented by the SWP reveal an obeisance to a thuggish and discredited aesthetic ethos not part of the *western aesthetic canon*. The canon has shown how *complimentary* colors,textures and materials are what is deemed valuable. The SWP posits a ethos that would slavishly place brick set against brick for instance and green set against green and so on, in an attempt to contextualize with the existing neighborhood. Notwithstanding the absurdity for instance of a new "lick 'n stick" brick building with brick veneer appliqué set against an existing 100 year old load bearing brick building, resplendent with its community affirming, psychological presence of weight, permanence and historical gravitas, the sense of authentic place is perturbed by the violations contained within the SWP of the aesthetic canon, a violation of the General Plan. The failure by LSA Associates to recognize the importance or the existence of the western aesthetic canon does not take away from the fact that the SWP will degrade the existing neighborhood because of its inherent violations of the canon. It is a measurable thing. **4**

Lastly, since these General Plan violations in letter and spirit alluded to here measurably degrade the livability of Emeryville, and since the SWP will add density to the neighborhood,community and city and density has a negative effect on livability in terms of traffic, pollution, light and glare, noise, etc. while providing virtually no positive revenue for the City of Emeryville and since Emeryville has already provided more than 200% of market rate housing as recommended by the Association of Bay Area Governments (ABAG) and therefore can be fairly said to have provided more than its regional share, the No Project Alternative must be shown to be superior, a conclusion not properly revealed by the DEIR. For this reason and all the above General Plan violations not sufficiently taken up by the DEIR, the DEIR is thus shown to be insufficient to the task of identifying and providing mitigation for environmental impacts that will befall the community as a result of the SWP as presented. **5**

Brian Donahue

3/7/16

COMMENTER C6

Brian Donahue
March 7, 2016

Response C6-1: The commenter asserts that the proposed project "…is in opposition to the General Plan in myriad ways…", and then lists various topics (e.g., affordability of housing, "family friendliness", park/open space), but does not cite specific General Plan policies or goals within the comment. Chapter V, Planning Policy, of the Draft EIR provides a discussion of the proposed project's consistency with land use policy documents. As noted on page 439 of the Draft EIR, policy conflicts are not in and of themselves considered significant environmental impacts under CEQA unless they would result in physical environmental impacts. The comment provides no instances where a potential policy conflict would result in an environmental impact to which specific responses can be made.

Response C6-2: Please see Responses B1-3 and B2-9 for a discussion of parks/open space. Please see Master Response 2 for a discussion of the Development Bonus.

The components of the comment related to affordable housing, family friendly units, composition of the retail, and type of housing related to the design of the project, not the analysis or information within the Draft EIR; no further response is required.

Response C6-3: Please see Master Response 2 and Response C6-1 for a discussion of policy consistency.

Response C6-4: See Master Response 2 regarding a discussion concerning the design of the project and the purpose of the Draft EIR. The comments regarding the western aesthetic canon are noted.

Response C6-5: See Response B5-1 regarding quality of life issues such as "livability." See Response B2-95 regarding alternatives, and B2-99 regarding the adequacy of the Draft EIR.

Letter
C7

From: Alicia Gallo <gallo087@gmail.com>
Sent: Monday, March 07, 2016 9:20 PM
To: Miroo Desai
Subject: Comments for Draft EIR, Sherwin Williams Development

Hello,

I am writing to submit the following comments regarding the information found in the Draft EIR for the Sherwin Williams Development:

The Parking section of Project Description document states that "structured parking will be included in all proposed new buildings"

- I could not locate any information that indicated how many of the spaces will be allocated to different types of users (residents, visitors--both to residents and businesses--, and employees of the commercial/office spaces). Does this information exist? I would hope that a portion of the parking spaces created in the structures would be allocated for visitors and employees of the commercial spaces.
- I also could not locate information related to any cost related to use of the parking spaces (parking fees may help mitigate increase in the number of vehicle trips associated with the development). Will parking fees (residential and visitor) be a part of the development? 1

The Circulation section in Project Description document describes the types of infrastructure for vehicles, bicycles, and pedestrians that will be created.

- This section does not include any mention of bicycle infrastructure within the roadways that will be created (i.e. Hubbard, 46th Street). The creation of new roadways is a prime opportunity to build-in bike lanes, which would promote cycling and mitigate the volume of vehicular traffic. 2

From the information outlines in the Cumulative Impact section of the Summary document: All findings related to traffic-related cumulative impacts are very concerning, especially on bike boulevard roadways. Even with the various mitigation measures in effect, I'm not sure if the current roadway infrastructure can support the influx of vehicle traffic associated with such a high density development. 3

From Summary of Impacts and Mitigation Measures (Table II-1) in the Summary document:

- While I appreciate the proposed mitigation measures intended to decrease the volume of vehicle traffic on Horton, considering the anticipated increase of traffic along surrounding streets (Hollis, 40th, San Pablo), I don't think that any traffic calming measures on Horton would convince drivers to use these other roadways. I highly doubt that most drivers would choose to slowly move along/sit through multiples cycles of traffic lights on 40th, Hollis, and San Pablo, rather than drive over a few speed bumps on 45th or Horton. 4

Lastly, there is one traffic-related impact that I believe will occur during construction and operation of the proposed Sherwin-Williams development is missing from the Summary of Impacts and Mitigation Measures document: traffic flow and parking patterns of delivery/service vehicles. Currently, throughout the City of Emeryville (and very frequently on Horton--a bicycle boulevard), delivery vehicles (USPS, FedEx, UPS, etc) and service vehicles double park in bicycle lanes in order make deliveries/conduct business at the various commercial spaces located along this street. This is a very common practice that creates hazardous conditions 5

for cyclists who must move into vehicle traffic lanes in order to use the roadway/pass these vehicles. I would anticipate that in the absence of any mitigation measures to address this practice, the same would happen along the streets in/along the Sherwin-Williams development. I would like to know if there are any mitigation measures that can be taken to address this issue; if mitigation measures have not been considered, I would like to suggest that designated delivery/service vehicle parking spots be built into the parking plan, and that an enforcement plan be drafted. **5 cont.**

Thank you for your time and consideration of my comments/concerns,
Alicia

COMMENTER C7

Alicia Gallo
March 7, 2016

Response C7-1: Details regarding the design of specific parking structures have not been developed, but parking would be provided based on the current City Code requirement, with spaces designated for some specific user groups. Some spaces would be reserved, such as for some of the residents, but other spaces would be shared between uses.

The cost of parking for the residential uses would be unbundled from the rental cost to encourage lower rates of vehicle ownership within the residential portion of the project.

Response C7-2: Bicycle travel on 46th Street and Hubbard Street would be accommodated via the vehicular travel lanes. Vehicle volumes and travel speeds on 46th Street and Hubbard Street are projected to be low, and providing additional pavement for bicycle lanes could increase vehicle travel speeds.

Response C7-3: This comment summarizes potential bicycle boulevard impacts. Analysis of intersection operations was also conducted for information purposes and presented in the Draft EIR. Potential intersection improvements for vehicle travel were balanced against other modes of travel.

Response C7-4: Traffic calming measures under consideration for Horton Street include the construction of partial street diverters that would physically prevent some travel movements, such that through traffic would shift to other travel routes. The secondary impacts of partial street diverters were evaluated and discussed the Draft EIR.

Response C7-5: The proposed project includes designated off-street loading zones to accommodate deliveries to the commercial uses and move-in/move-out activities for the residential uses. The Draft EIR also recommends designated an on-street loading zone on Hubbard Circle to facilitate small deliveries such as from UPS, FedEx, etc.

Letter
C8

From: Nora Pauwels <npauwels@att.net>
Sent: Monday, March 07, 2016 10:53 PM
To: Miroo Desai
Cc: Miroo Desai
Subject: written comments on dEIR Sherwin Williams

March 7, 2016

City of Emeryville Planning & Building Dept. Attn: Miroo Desai 1333 Park Ave. Emeryville, CA 94608

Via email mdesai@ci.emeryville.ca.us; mdesai@emeryville.org

Re: Sherwin Williams Development Project draft EIR Submission of Written Comments SCH # 2004122083

Dear Ms. Desai,

I live at the 45th street Artists Co-op on Horton street right across the street from the existing Sherwin Williams building. **1**

We need the EIR to add a visual simulation and a cumulative visual simulation from 45th street and Horton. We need to see how this project will affect the scenic vistas from our viewpoint.

The viewpoints included on pages 379 – 390 / pages 419 – 429 are;

1 - from 40th street **2**

2 - from Hubbard street

3 - from Sherwin street

4 - from Bay street mall ……. none from 45th street and Horton !

Also, the shadow studies claim that the project will not affect the 45th street Co-op as a future solar collector. But the loss of light from this massive project will majorly affect our work as artists. **3**

Nora Pauwels

COMMENTER C8

Nora Pauwels
March 7, 2016

Response C8-1: This comment is introductory in nature and describes where the commenter lives.

Response C8-2: Please see Response B2-85 regarding review of visual resources.

Response C8-3: As noted on page 396, shadow pattern simulations (Figures IV.M-10 through IV.M-27 within the Draft EIR) depicting existing conditions surrounding the project site were prepared by Environmental Vision for the following dates: June 21 (the summer solstice when the sun is at its highest point in the sky); December 21 (the winter solstice, when the sun is at its lowest point in the sky); September 21 (the fall equinox, when the day and night are approximately the same lengths). A shadow pattern simulation for March 21(the spring equinox) was not prepared because the shadows on this day are comparable to shadows on September 21. Therefore, September 21 and March 21 are grouped and analyzed together. Simulations were prepared for three times during each day: 9:00 a.m. (morning); 12:00 p.m. (noon); and 3:00 p.m. (afternoon). The shadow simulations assume sunny conditions, and do not take into account fog or overcast conditions. Existing shadows in the vicinity of the project site are cast from the two- to eight- story residential, industrial, and mixed-use buildings that surround the project site. As shown in the shadow simulations included in the Draft EIR, no new shadows associated with implementation of the proposed project would fall on the 45th Street Artists' Cooperative.

Letter

C9

From: John Scheuerman <streetcars4us@att.net>
Sent: Monday, March 07, 2016 7:38 PM
To: Miroo Desai
Subject: Sherwin-Williams EIR Comments
Attachments: Sherwin-Williams Call for More - 06Mar2016.docx

Hi Miroo-

I wrote an article that requests another alternative be provided in the EIR. This alternative combines higher density with greatly improved transit. The format may be a bit odd for draft EIR comments, but the article provides the rationale for a different option. Please include the attached in the draft EIR comments. **1**

Thanks-

John

Letter
C9
Attach.

Sherwin-Williams Redevelopment – We Can Do ~~Better~~ More

I'm a big believer in synchronicity. A thoughtful neighbor gave me a copy of the book Democratic Architecture – Practical Solutions to Today's Housing Crisis the same week the Planning Commission heard public comment on the Sherwin-Williams draft EIR. After reading the book and watching the Planning Commission meeting, I was compelled to write this article. The intention of this article is to open the door to new ways of thinking that may lead to a more livable, equitable, sustainable, and prosperous Emeryville. It is not an attack on residents of the Park Avenue District. I have great respect and gratitude for many of these pillars of the community who have greatly contributed to making Emeryville the exceptional city that it is.

I have three 'take-aways' that I would like to share from Democratic Architecture, published in 1996:

1. The Bay Area housing crisis that existed in the 1990's has gotten worse
2. We need to be more creative in our housing solutions
3. NIMBYism can be the enemy of great projects

Housing affordability is one of the biggest challenges facing Emeryville and the Bay Area today. While there is no 'silver bullet' to solve this very complex problem, we can help alleviate the problem by increasing the general housing stock and diversity, increasing our supply of affordable housing units, and better connecting excellent transportation with wise land use. Instead of reducing density at the Sherwin-Williams project, we should be increasing density that is combined with significantly improved transit access. **2**

Our well-intended requirement for new residential units to be of 100% family friendly design stifles creativity and is at odds with our desire for a diverse community. Instead of mandating 100% family friendly design, let's take a more reasonable approach that links the percentage requirements with Bay Area demographics. Democratic Architecture makes a case for designing flexibility into living spaces that allows for changes as our needs change. Let's shift our focus from mandates that serve one group to flexible designs that will support our diverse community. Input on how to design our spaces should come from the people that inhabit them.

I find it quite ironic that many residents of the 45th Street Artist Coop, a form of subsidized housing, are the most vocal opponents to increasing density that can bring housing affordability to others. Democratic Architecture states, "*In the housing industry, the undemocratic obstruction usually takes the form of what is known as "Nimbyism," meaning "Not in My Back Yard." Time and again these minority neighborhood groups have prevented the construction of affordable homes and have been responsible for the perpetuation of suburban sprawl. Rather than spend countless hours negotiating and manipulating these groups through the mandatory public hearing process, builders and their architects often shy away from a project or compromise the building design to the point that it bears little resemblance to the original concept*." This statement rings true of the Sherwin-Williams development. We are squandering the opportunity to create a wonderful urban village.

Letter C9 *Attach.*

I write this article from the perspectives of being a resident of Pacific Park Plaza (PPP) for over 20 years, a former Emeryville Planning Commissioner, and former member of the General Plan Update Steering Committee. Like many of my neighbors in the 45th Street Artist Lofts, I frequently work at home and rely on open doors and window for ventilation. My immediate neighborhood has been in a fairly constant state of construction and redevelopment the entire time I've lived in Emeryville. I've experienced dust and noise but the noise has been minor relative to the noise of the trains that pass through Emeryville.

Overcoming Fears of Density

During the course of the Sherwin-Williams public engagement process, a well-respected former Planning Commissioner commented that "density = traffic." This widely held belief is disturbing on two levels; 1) Given the way that we've built car-centric cities for the last sixty years, there's an alarming element of truth to the statement. 2) The "Density = traffic" mentality creates fear and discourages increased density that can bring excellent transit service (and reduced car traffic), vibrancy, safety, and support local serving businesses. Density without high quality transit, bike, and pedestrian connections can be a formula for disaster. But density combined with high quality transit, bike, and pedestrian connection is a significant part of a formula for creating the greatest cities in the world.

2 cont.

There are 586 residential units at PPP. It's rational to think that this many units would create significant traffic in the neighborhood. My experience has been very different. During the many years that I commuted to work and left home and returned during commute hours, I seldom encountered other cars entering and leaving the PPP parking garage. When the neighboring Avenue 64 and Emme apartments came on line, I didn't observe a noticeable increase in traffic. However, I did notice that Christie Avenue came to life with more pedestrian activity. My neighborhood now has sufficient density to support a higher level of transit service. AC Transit is in the process of modifying routes to better serve this area. I'm seeing many more people using transit. A virtuous circle is created when density is increased and transit is improved.

The proposed Sherwin-Williams project provides 460 dwelling units on 8.5 acres. Comparatively, the apartments next to PPP at Avenue 64 and Emme provide 417 units. Below is a Google Maps image of the area around PPP. Shown within the orange box are Avenue 64 and Emme (image shows Emme Apartments site prior to construction). These apartments sit on about 4.2 acres total – about half the area of the Sherwin-Williams site. Yet Avenue 64 and Emme provide only 43 fewer dwelling units than Sherwin-Williams. The total number of dwelling units in the area around PPP is currently 1,688 – nearly <u>four times</u> what is planned for Sherwin-Williams. Considering that all these homes share the same streets with other commercial, retail, and food service buildings, traffic is nowhere near what one would expect. I provide this information because, with a project as important as Sherwin-Williams, unsubstantiated opinion simply won't do. We must base our decisions on fact and real world experiences, not fears.

Letter C9
Attach.

2 cont.

Sherwin-Williams High Density / Transit Rich Alternative

In the post Redevelopment Agency era that we now live in, collaborating with developers is essential to creating what we've envisioned in the General Plan and the Park Avenue District Plan. Although often vilified in Emeryville, my experiences with developers have been very positive. I've found that most developers truly want to create great projects and are willing to cooperate and collaborate. We can foster these essential relationships by engaging early in the design process instead of *negotiating* deals at the eleventh hour of final development approval.

The Sherwin-Williams project gives us an opportunity to partner with the developer to create an outstanding project that can be both a win for the developer and a win for Emeryville. I would like to have the draft EIR include a high density / transit rich alternative. This alternative will have five essential elements; 1) A specified and agreed upon amount of affordable housing. 2) The future Emeryville Streetcar will be incorporated into the design. 3) A direct bike/pedestrian ramp from the new South Bayfront Bike/Ped Bridge to a streetcar stop at the core of the new project will be provided. This ramp provides access to transit service on Shellmound Street, will be considered part Emeryville Greenway and will constitute a portion of the open space requirement. (A southbound ramp from the bridge deck was discussed during the planning of the South Bayfront Bridge.) 4) Ground floor 'flex' space will be provided at the core area surrounding the planned streetcar stop. This space may be used for commercial/retail/work-live. 5) Increased density that provides more housing and retail space. 3

By combining excellent transit with increased density that is balanced with quality park space, we can achieve a more livable, equitable, sustainable, and prosperous Emeryville.

Letter
C9
Attach.

Conceptual Layout and Building Massing

3
cont.

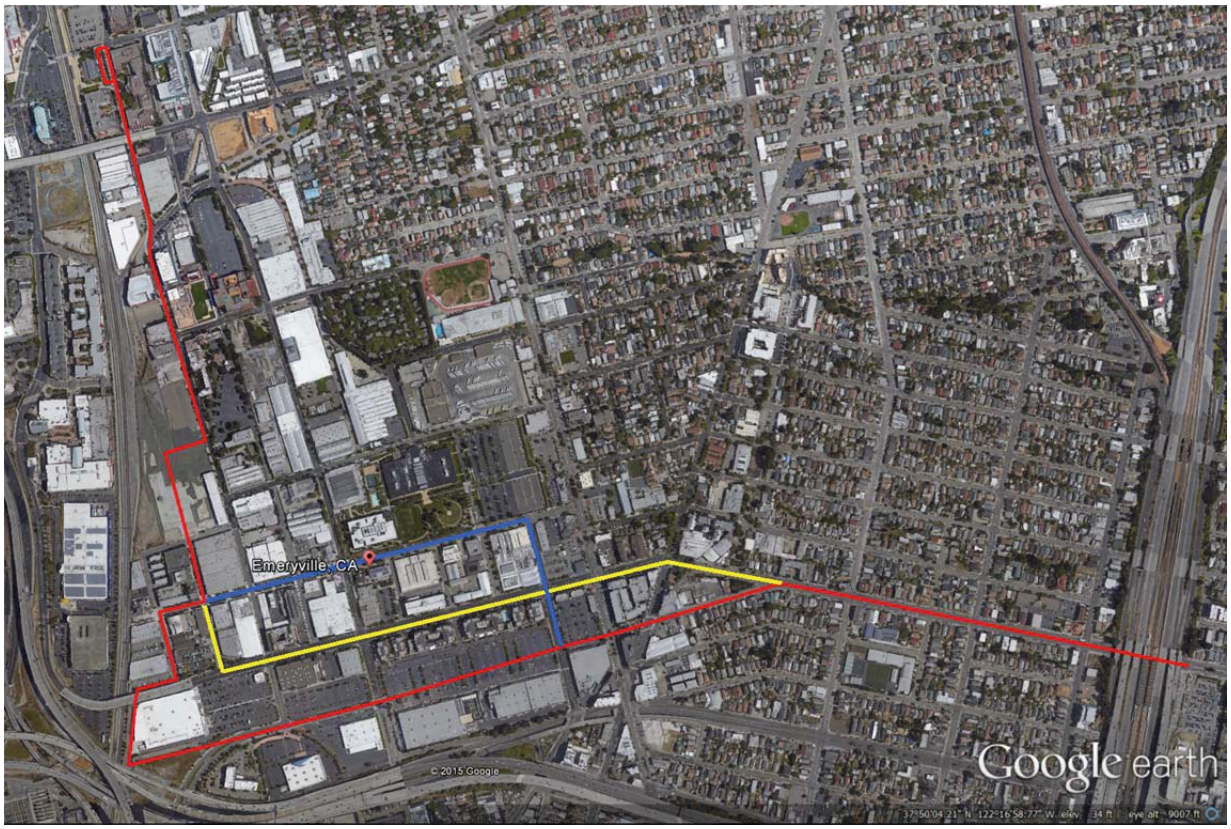
The Emeryville Streetcar

For more information about the Emeryville Streetcar, check out the following links:

http://www.emeryville.org/944/Emeryville-Berkeley-Oakland-Transit-Stud

http://ebot.info/ (Somewhat dated, but provides a good overview of the streetcar system.)

https://www.youtube.com/watch?v=xL7QEQuRqq0 (Minute 3:33 provides an example of how the streetcar can mesh with the Sherwin-Williams development.)



Conceptual Emeryville Streetcar Routes (Amtrak to MacArthur BART)

For more information about the ideas provided or to provide feedback to the author, please email John Scheuerman streetcars4us@att.net

COMMENTER C9

John Scheuerman
March 7, 2016

Response C9-1: The commenter letter has been included in the RTC Document as Letter C9. Responses to the letter are provided in Responses C9-1 through C9-4.

Response C9-2: This comment includes the commenter's summary of the book *Democratic Architecture – Practical Solutions to Today's Housing Crisis*, as well as the commenter's opinion that the project should increase density at the project site. This comment relates to the project design and does not relate to the adequacy of the information or analysis within the Draft EIR. Comments that focus solely on the merits of the proposed project will be considered by City decision-makers as they review these materials, and no further response is required under CEQA.

Response C9-3: This comment requests an additional "high density/transit rich" alternative be evaluated within the Draft EIR. CEQA Guidelines Section 15126.6 states that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Furthermore, as noted in CEQA Guidelines Section 15126.6(a), "An EIR need not consider every conceivable alternative to a project."

The Draft EIR currently includes a range of alternative to the proposed project, as summarized in Table VI-1 of the Draft EIR. While the commenter does provide some information about this proposed alternative (including that it would incorporate an agreed upon amount of affordable housing and the proposed Emeryville Streetcar), it is unclear how this alternative would avoid or reduce the significant environmental effects identified by the Draft EIR. Furthermore, it is unclear whether the increased density, as proposed by the commenter, would be permitted under the City's General Plan and zoning ordinance.

Response C9-4: This comment provides additional information about the Emeryville Streetcar, references, and contact information, but does not address the information or analysis within Draft EIR. No further response is required.

Letter C10

March 7, 2016

To: Emeryville Planning Commission
From: Mike McConnell
Cc:

The Sherwin-Williams site development can be a tremendous addition to the fulfillment of the vision for the Park Avenue neighborhood. But it can also badly damage the neighborhood, depending on the approach taken.

A key attribute of the Sherwin-Williams site is that at its northern side, is Grifols and Novartis, with large buildings and approval to build even two towers. At the eastern and southern sides, however, are one-, two-, and three-story buildings, many with beautiful features, and in the case of the Emeryville Warehouse Lofts, award-winning architecture that respected the neighborhood's contours. 1

Along Park Avenue are one- and two-story, older brick buildings of great character. For example, the Pelco Building at the corner of Halleck and Park (one block south of Sherwin Avenue), which was enhanced by the Park Avenue redevelopment:

Letter
C10
Cont.

The Emeryville Warehouse Lofts was formerly a three-and four-story dilapidated warehouse – larger than the scale of the surrounding neighborhood. Therefore, when retail and loft units were built along Park Avenue and in front of the new EWL parking lot, the two-story heights of the street were respected (note how at the far west corner, there is even a slanted roof feature to mirror the bevels of the roof of the Pelco building across Halleck):

This placed the EWL building in scale with its neighbors to the west and east, as well as across Park Ave.

1 cont.

The EWL building is 4 stories high in the middle of the block, but was also three stories along Sherwin. And when Rick Holliday and David Baker wanted to build three penthouses on the roof (up to six for four units), it did so in the **middle** of the building and the **middle** of the block, to respect the character and heights of its neighbors. It also made those penthouses of corrugated

iron to give them less visual "mass." These are not visible from the street, only from the EWL courtyard.

Hubbard St. from Park Ave, looking toward Sherwin

1 cont.

Hubbard St. from Sherwin, looking toward Park Ave.

As can be readily seen, visually, the EWL is a three- (and for 1/3 block, a four-) story presence in the neighborhood; its few fifth- and sixth-floor penthouse units float above it, hardly visible from street-level.

Letter
C10
Cont.

This respect for the smaller-scale development in the area was specifically highlighted in the Park Avenue District Plan:

Emeryville Warehouse Lofts includes an added penthouse which is set back from the street and is so integrated into the design of the building that it is barely noticeable from the street level that it is the highest structure in the district.

:

1 cont.

The most recent development in the vicinity, Blue Star Corners, is on Halleck and Sherwin, immediately adjacent to the Sherwin-Williams property. Here, Holliday and Baker limited the height of the Blue Star Corner townhouses to three-stories.

Looking north toward Sherwin along Halleck St. with Pelco on the left, Blue Start Corner on the right.

Letter C10 *Cont.*

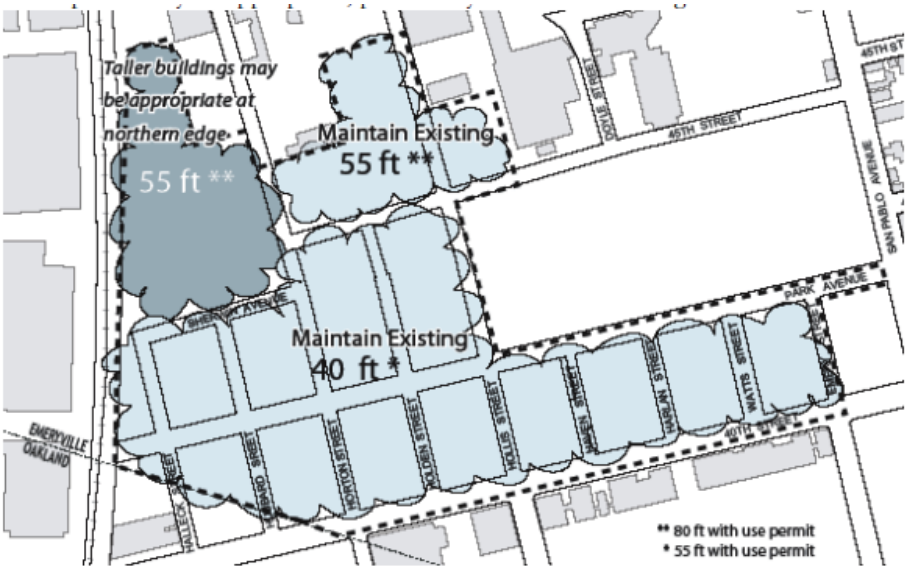
Finally, of course, is the remaining Sherwin Williams Building itself. At three stories, it is the tallest building in the vicinity, next to EWL, and it is two full stories taller than its immediate neighbor, the Artists' Coop:

1 cont.

The Park Avenue District Plan is clear: "Development in the district has the opportunity to intensify now that heavy industrial uses are no longer in existence and land values are rising. However, this development should maintain the fine-grained character of the district. In most of the district, the desired increase in intensity will occur as buildings redevelop to the existing height limits allowed with a conditional use permit (55 feet south of 45th Avenue and 80 feet north of that). Therefore these height limits should remain. However, North of Sherwin Avenue and west of Horton Street (the large Sherwin Williams site, which will likely be redeveloped soon) some taller and more intense development may be appropriate, particularly at the northern edge."

The map included in the Park Avenue District Plan makes this perfectly clear: it shows a maximum of 55 feet south of the Grifols/Novartis parking lot, and "taller buildings" only north of that.

2



Proposed Building Heights.

Letter C10 *Cont.*

Therefore, in reading this deeply flawed and inadequate DEIR, it was shocking to read the following, none of which are true and all of which should be deleted before the City accepts this report:

The starting premise is the Big Lie, from which all others flow: "Per the Park Avenue District Plan, the Sherwin-Williams site is envisioned to be a site with taller building heights and a more intense development program." (p. 76 - Conflict With Land Use Plans Adopted to Mitigate Adverse Environmental Impacts.) 3

Actually this statement is half correct. <u>The project as proposed, and the Lennar alternatives, are a clear attempt to bring Bay Street Mall aesthetics to the Park Avenue District</u>. All three violate both the letter and the spirit of the Park Avenue District Plan.

Further blatant mis-characterizations appear in the Visual Character section: "Most of the District's buildings are one- to two-stories in height; however, new construction in the area tends to be four- to eight-stories tall. The Emeryville Warehouse Lofts is the tallest building in the District at 73 feet and is located on the southwest corner of Sherwin Avenue/Hubbard Street intersection, across the street from project site." (p. 378 - Visual Character of the Surrounding Area) 4

The conclusions are therefore also patently false to anyone who has spent even a few minutes walkling the streets of the District: "The proposed development would be within the scale and form of the more recent development within the area including Bay Street Mall and the Emeryville Warehouse Lofts to the west." (Impacts and Mitigations – Visual Character, p. 394)

"The addition of five new buildings and the rehabilitation of the existing Sherwin-Williams Building 1-31 would not degrade the existing visual characteristics of the area, and would improve the visual character of the site." (p. 395 – Visual Character) 5

"**The proposed project would result in a less-than-significant impact related to visual character."** (p. 395 – Visual Character)

In summary, since there is no pre-existing building other than the Sherwin-Williams structure on the site (which is 42 feet high), then to be consistent with the *spirit* of the Park Avenue District Plan would produce one-and two-story units along Sherwin and south of the Grifols/Novartis parking lot. To be consistent with the MAXIMUM letter of the District Plan, a hard cap of 55 feet would prevail south of the Grifols/Novartis parking lot.

The DEIR is misleading and inaccurate. It should be rejected as inadequate and flawed, or corrected before its acceptance 6

Respectfully,

Mike McConnell
1500 Park Ave. PH1
Emeryville

Letter
C10
Cont.

This has no place in the Park Avenue District.

6
cont.

COMMENTER C10

Mike McConnel
March 7, 2016

Response C10-1: Within this comment, the commenter provides pictures of buildings within the Park Avenue District neighborhood. The comment does not address the analysis or information within the Draft EIR.

Response C10-2: Please see Master Response 2 and Response B2-20 regarding compliance of the project with City policies and plans.

Response C10-3: Please see Master Response 2 and Response B2-20 regarding compliance of the project with City policies and plans.

Response C10-4: The commenter quotes text from the Draft EIR, but provides no information or analysis regarding how the cited Draft EIR text is a "mischaracterization"; and no specific response can be provided.

Response C10-5: The commenter quotes text from the Draft EIR, but provides no information or analysis regarding how the cited text is "patently false"; no specific response can be provided.

Response C10-6: Please see Master Response 2 and Response B2-20 regarding compliance of the project with City policies and plans. The comment does not provide additional information or analysis to support the claim that the "DEIR is misleading and inaccurate."

Letter
C11

From: peterson_kristin@comcast.net
Sent: Tuesday, March 08, 2016 7:43 AM
To: Miroo Desai
Cc: Miroo Desai; mdasai@emeryville.org
Subject: Response to the DEIR
Attachments: DEIR_Comments.pdf

Dear Ms. Desai;

Please see the attached letter in response to the DEIR. I also have concerns that the information given at the last Planning Commission meeting regarding process was incorrect. Please see the email below from Paul Germain. The research I did came up with the same results as Paul's.

Thank you.

Kris Peterson
1420 45th St. #48
Emeryville CA 94608
peterson_kristin@comcast.net
510-653-3634

1

Dear Planning Commission members....

There seems to be some confusion and possible miss-information disseminated about the re-circulation of the EIR. Below is some research done by the Sherwin Development Committee of the Emeryville Artist's Cooperative (SAC).

Recirculation of Draft EIR

A Draft EIR must be recirculated when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR for public review but before Final EIR is certified. "Information"; can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the Department has declined to implement. "Significant new information" requiring recirculation includes:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the Department declines to adopt it.
4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

2

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

Letter
C11
Cont.

If the revision is limited to a few chapters or portions of the EIR, the Department need only recirculate the chapters or portions that have been modified.
Recirculation of an EIR requires the same notice and consultation as the previous Draft EIR.
A decision not to recirculate an EIR must be supported by substantial evidence in the administrative record.
Recirculating an EIR results in receiving more than one set of comments from reviewers. Following are two ways to identify the set of comments to which to respond. This dual approach avoids confusion over whether it is necessary to respond to comments that are duplicates or which are no longer pertinent due to revisions to the EIR. In any case, responses to pertinent comments on significant environmental issues must be provided.

1. When the EIR is substantially revised and the entire EIR is recirculated, the Department may require that reviewers submit new comments and it need not respond to those comments received during the earlier circulation period. The Department must advise reviewers, either within the text of the revised EIR or by an attachment to the revised EIR, that although part of the administrative record, the previous comments do not require a written response in the final EIR, and that new comments must be submitted for the revised EIR. The Department need only respond to those comments submitted in response to the recirculated revised EIR. The Department must send directly to every agency, person, or organization that commented on the prior draft EIR a notice of the recirculation specifying that new comments must be submitted.
2. When the EIR is revised only in part and the Department is recirculating only the revised chapters or portions of the EIR, the Department may request that reviewers limit their comments to the revised chapters or portions. The Department need only respond to (i) comments received during the initial circulation period that relate to chapters or portions of the document that were not revised and recirculated, and (ii) comments received during the recirculation period that relate to the chapters or portions of the earlier EIR that were revised and recirculated. The Department's request that reviewers limit the scope of their comments must be included either within the text of the revised EIR or by an attachment to the revised EIR.

When recirculating a revised EIR, either in whole or in part, the Department must, in the revised EIR or by an attachment to the revised EIR, summarize the revisions made to the previously circulated draft EIR.

Paul Germain,
Co-Chair Emeryville Artist's Cooperative Sherwin Williams Development Committee
Co-Chair PARC (Park Avenue Resident's Committee)

2 cont.

Letter
C11
Attach.

Kristin Peterson
1420 45th St. #48
Emeryville, CA 94608

RE: Sherwin Williams DEIR
March 8th, 2016

Miroo Desai. AICP
Senior Planner
City of Emeryville
1333 Park Avenue
Emeryville, CA

Dear Ms Desai;

I am a member of the 45th Street Artists Coop. The majority of the artists at the Coop work in their studios during the day and earn their livelihood doing so, making the impact of the Sherwin Williams construction very significant. The studios are not only used to execute art work, but also to entertain clients, gallerists, publishers and conduct workshops in their studios. These activities are all imperative to the ability to earn a living and tend to take place during the proposed construction hours.

Most coop members are home 24/7. We have no air conditioning or air filtration, and rely on windows and skylights for ventilation, leaving us quite vulnerable to construction fallout. We went through the remediation of the Sherwin Williams site so we are quite familiar with the impact the construction of this project could have. This is, in part, why construction and traffic impacts are of such great concern. **3**

During toxic remediation we had issues with trucks idling while in cue. This is not only a noise issue but the fumes compromised the health and quality of life of a number of coop members. Please specify that truck idling be completely forbidden. **4**

The construction schedule for the project is estimated to begin in the third quarter of 2016 and continue for 32 to 34 months, taking it well into 2019. In the beginning of appendix C, Emissions Summaries for the data listed for both Mitigated and Unmitigated Construction (pages 5, 6, 31, 53) shows only 2016 and 2017, representing only 15 months. While there are Emissions breakdowns later in this section there was nothing for 2018 and 2019 that paralleled the data in these summaries. It seemed as though some of the information was missing completely. Please review the data presented in Appendix C and provide the data breakdowns in a clear and concise format. **5**

Neither Lennar's alternative or the Reduced Density Alternatives use the circular drive motif from the initial designs. The removal of that drive radically changes traffic patterns. With four alternative designs that do not include the circle drive there needs to be a much deeper investigation of the impacts of traffic scenarios without the circular drive. Please provide an in-depth study of what the impact of the project without the circular drive. **6**

This DEIR is based on a project that can't be built without utilizing the maximum allowable bonus points, yet the project does not meet the criteria to be awarded the maximum bonus points. The project description states that there will be no affordable housing making it ineligible for the maximum number of points. This changes the criteria the DEIR is based on. The EIR should be based on the project that can be built with the points earned. **7**

Overall this entire DEIR is a poorly constructed document. The project description is vague and generic. Referencing is completely inadequate. There were a number of comments to the NOP that have not been addressed, and need to be addressed in order for this DEIR to truly address the impacts this project will have. I sincerely hope that the you reissue the DEIR and reopen the comment period. It would be nice if what is finally built on the Sherwin Williams property is something the city and the neighbors can take pride in. **8**

Sincerely;

Kristin Peterson

COMMENTER C11

Kristin Peterson
March 8, 2016

Response C11-1: This comment is introductory in nature and addresses re-circulation of an EIR. This comment does not address information or analysis within the Draft EIR, and no further response is required.

Response C11-2: This comment includes the commenter's interpretation and summary of CEQA Guidelines Section 15088.5, Recirculation of an EIR Prior to Certification. This comment does not address the analysis or information within the Draft EIR; no further response is required.

Response C11-3: This comment is introductory in nature, describing the residents of the 45th Street Artists' Cooperative and the use of their building. While the commenter describes concerns related to construction, no specific environmental impact concern is identified. Mitigation Measure AIR-1, identified on pages 210 and 211 of the Draft EIR, would reduce construction-related dust impacts to a less-than-significant level. Toxic air contaminants were evaluated within the Draft EIR starting on page 213 of the Draft EIR. Construction-related traffic impacts were evaluated within the Draft EIR starting on page 171. Construction-related noise impacts are evaluated within the Draft EIR starting on page 261 of the Draft EIR.

Response C11-4: See Response B3-19. Truck idling is limited to 5 minutes or less under California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Mitigation Measure AIR-1 would limit idling to 2 minutes or less. In compliance with Mitigation Measure AIR-1, signage will be provided for construction works at all access points. Some idling of less than two minutes would be necessary to allow for intersection delay and internal site circulation, however, any idling above two minutes would be prohibited.

Response C11-5: Total construction emissions were estimated using the CalEEMod default construction estimation duration. Average daily emissions were calculated based on the total project construction emission estimates considering the entire construction duration. All phases of construction (both exterior activities during which time large construction equipment is used and interior construction activities which does not involve large landscrapers and bulldozers) are accounted for and clearly shown in Appendix C of the Draft EIR.

Response C11-6: The commenter notes that a "circular drive motif" was not included in some alternatives and that additional analysis should be undertaken to identify any impacts associated with not including the circular drive.

CEQA Guidelines Section 15126.6 states that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most [emphasis added] of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Furthermore, as noted in CEQA Guidelines Section 15126.6(a) "An EIR need not consider every conceivable alternative to a project." The alternatives included in the Draft EIR meet these requirements. Additionally, as allowed by CEQA, alternatives need not be described and evaluated to the same degree as the proposed project, and the Draft EIR provides a sufficient level of information to allow decision-makers to make a decision regarding the project and the proposed alternatives. Additionally, Table VI-2 on page 474 shows the daily and peak vehicle trips for the proposed project and compares vehicle trips for each alternative to those for the project. The analysis of each alternative discusses impacts related to vehicle trips. Whether or not there is a circular drive is a specific design detail that does not need to be evaluated for each alternative in order for the City Council to make a decision about the project and the adequacy of the EIR.

Response C11-7: Please see Master Response 2 regarding the Development Bonus.

Response C11-8: Please see Response B2-2 for a discussion of the information required to be included in an EIR project description.

The commenter provides no citations where "referencing is completely inadequate" and does not cite specific examples of comments provided in the response to the NOP that were not addressed: as such no specific responses can be provided. Please see Response B2-99 for a discussion regarding when recirculation of an EIR is required.

Letter
C12

From: Jack@jackghizzoni.com
Sent: Tuesday, March 08, 2016 10:50 AM
To: Miroo Desai
Subject: Sherwin Williams EIR

To whom it may concern,

I am writing about the DEIR for the Sherwin-Williams Mixed Use Project. I am a homeowner in the Emeryville Warehouse Lofts building, so I feel that the success or failure of this project will have a large impact on the place I call home. As a result, I am really hoping that this project is very successful. 1

I do have a number of concerns about the project.

Firstly, I am concerned about the visual impact of the development on Sherwin Avenue and Horton Street. The one currently existing building for this project, Sherwin-Williams Building 1-31, is a very beautiful building, and a real asset to the neighborhood.

At its 42' height, it really fits in with the surrounding architecture, and does not dominate existing structures. I think adding buildings with a greater height would have a negative impact on these streets. 2

Specifically, I'm concerned about the height of the structures on Parcels C-1, B-1, and B-2. The height of buildings away from the street seems less critical to me.

In Option A, where the city-owned parcel is integrated more centrally into the development, leaving an open space directly across Sherwin Avenue Emeryville Warehouse Lofts (EWL), I think the effect of building height is mitigated somewhat. I think this pushes heavily for Option A, since it will reduce the negative visual impact of the project on EWL residents with northern views. 3

The proposed 55' height for the street-facing sides of buildings on Parcels C-1, B-1, and B-2 seems rather high to me, and will detract from the quality of residences facing these new structures. Worse, though, is the 75' height for the main core of these buildings. This seems excessive. While 55' is pushing it, but might work, 75' is clearly well out of scale with the surrounding neighborhood. Most buildings in this neighborhood are a little over half of that height. Having street-side structures that dominate the neighborhood would be a very negative change. 4

I do know that part of EWL is 75' tall, but adding more buildings of that height would be improving the look of the neighborhood. That part of the EWL building seems well away from the street, and covers only a small part of the overall structure, but I don't think that it would not be good to continue creating that sort of height in the neighborhood. Just because it has been done once doesn't mean it can or should be repeated. 5

The height of buildings that are further away from the streets seems like less of a visual issue to me, particularly where they border the railroad tracks. **5 cont.**

Secondly, and perhaps more importantly than the visual issues mentioned above, is the traffic impact of this development on the neighborhood. The increased traffic from a development of this size would be very significant. The fact that ingress and egress is completely blocked on the western side of the development by the railroad tracks only compounds the issue, and the resulting impact on the surrounding neighborhood.

This development would clearly turn a number of bicycle boulevards (some of which, particularly Horton Street, I ride on myself very frequently) into streets that could no longer be bicycle boulevards with the increased traffic. **6**

Losing these bicycle boulevards would be a more than trivial negative impact on the immediate neighborhood, and on surrounding areas containing bicyclists who travel through this area. To the extent that disincentives for car use, and incentives for bicycle, pedestrian and public transit alternatives can be integrated into the development, that would be a positive effect.

The increased traffic would also have the potential to take what are currently very peaceful and enjoyable streets in the surrounding area, and to make them much busier than they currently are. This also would be a significant negative impact on the surrounding area, both in terms of reducing the peacefulness of it, and in increasing noise, pollution and congestion.

Some of this could be ameliorated by increased public transit services to the area, which would be a good thing. As you may be aware, however, AC Transit is actually planning to eliminate one of the major bus services for the area (the Transbay F line). Significantly increasing the need for public transportation in an area where a bus line is potentially being eliminated could compound the negative impact of the development on the surrounding neighborhood. **7**

The negative impacts the project can have (visually through structure size and environmentally through increased traffic) raise the question - what does the development have to offer to the community? If it has the right things to offer to the community, the negative aspects will be seen in a different light.

The positive aspects of the project can be through diversifying the community economically (with affordable housing); providing community-oriented spaces (both as common public outdoor spaces, and community-friendly businesses). **8**

I'm not sure if commenting on a DEIR is the correct place to mention this, but I'll mention it anyway. Emeryville has too many mall-like chain businesses that detract from the quality of life in this town. Smaller, locally owned businesses are much more conducive to building communities, and really should be an emphasis for the retail and restaurant section of this project. **9**

If this project can have restaurant and service businesses like Scarlet City Coffee, Rotten City Pizza, Shiba Ramen, and Prizefighter, that would be a great addition to the neighborhood. The increased population density might be able to support these types of businesses, and these businesses all function as social spaces where neighbors can meet and interact on a regular basis. This sort of thing could help to build a strong and vibrant community.

I would hope that retail businesses in the development would also be locally-owned, providing the sort of goods that would be of use to people living in the neighborhood.

If the businesses allowed in the development are like the ones on Bay Street, or chain food services like Panera, that would be a real setback, multiplying the negative effect of the new buildings and traffic.

9 cont.

With these sort of things, this project could turn this area into a walkable and vibrant community. I really hope that this project succeeds in doing that. To do so, however, I think density and traffic issues will need to be addressed much more realistically than they are in the current DEIR. Addressing what sort of businesses will be put in the retail and restaurant spaces, and who those businesses are designed to serve, is also a very important part of the equation.

Getting those things right, or getting those things wrong, will be the difference between improving a community or damaging it. I hope that Emeryville is successful in making sure the community's interests stand on an equal or greater than equal footing with the developer's interests. Long after the developer has taken their profit and moved on, we will still be living here with the results.

10

Thank you for your time,

Jack Ghizzoni
1500 Park Avenue
Emeryville, CA 94608

COMMENTER C12

Jack Ghizzoni
March 8, 2016

Response C12-1: This comment is introductory in nature and states that the commenter lives in the Emeryville Warehouse Lofts building and has concerns about the project.

Response C12-2: As evaluated within the Section IV.M, Visual Resources, there are no significant visual resources impacts. Please see Response B2-18 for a discussion of building height allowed (with the Development Bonus) within the project site. Please see Response B2-20 for a discussion of heights within the Park Avenue District Plan area.

Response C12-3: The commenter expresses support for Option A compared to Option B, as evaluated within the Draft EIR. This comment relates to the project design and does not relate to the adequacy of the information or analysis within the Draft EIR. Comments that focus solely on the merits of the proposed project will be considered by City decision-makers as they review these materials, and no further response is required under CEQA.

Response C12-4: Please see Response B2-18 for a discussion of building height allowed (with the Development Bonus) within the project site. Please see Response B2-20 for a discussion of heights within the Park Avenue District Plan area.

Response C12-5: This comment relates to the Emeryville Warehouse Lofts and does not address the analysis or information contained within the Draft EIR; no further response is required.

Response C12-6: Traffic impacts are evaluated in Section IV.C, Transportation and Circulation in the Draft EIR. A discussion of the effects of the project on Bicycle Boulevards begins on page 143. The project will be conditioned to develop and implement a transportation demand management (TDM) program to reduce vehicle trips.

Response C12-7: The Draft EIR contains full discussions of the projects potential impacts related to noise (see Section IV.F, Noise), air quality emissions (see Section IV.D, Air Quality) and traffic congestion and transit (see Section IV.C. Transportation and Circulation). The comment regarding transit is noted.

Response C12-8: Please see Responses B12-2 through B12-7 that address the comments related to visual and transportation impacts.

The remainder of the comment relates the merits of the project, not the environmental analysis contained within the Draft EIR. Comments that focus solely on the merits of the proposed project will be considered by City

decision-makers as they review these materials, and no further response is required under CEQA.

Response C12-9: This comment relates the merits and design of the project, not the environmental analysis contained within the Draft EIR. Comments that focus solely on the design or merits of the proposed project will be considered by City decision-makers as they review these materials, and no further response is required under CEQA.

Response C12-10: This comment includes the phrase "…I think density and traffic issues will need to be addressed much more realistically than they are in the current DEIR…" It is unclear from the comment what additional analysis the commenter is suggesting or what deficiencies would require additional analysis.

Letter
C13

From: erin fong <erinfongfanclub@gmail.com>
Sent: Tuesday, March 08, 2016 1:07 PM
To: Miroo Desai; Miroo Desai
Subject: Sherwin Williams EIR

City of Emeryville,

I am writing due to my concern of the impending Sherwin Williams development and results of the EIR. I live at just across Horton Street at the 45th Street Emeryville Coop and feel that we all will be greatly impacted due to this development. I first want to state that I am not opposed to a new development and would welcome more people and a larger community over on this side of Emeryville. I do think the EIR does not properly address the issues at hand. 1

Traffic:
I currently walk my dog around the neighborhood at least twice a day and am astounded at the amount of traffic that flows along Horton Street at any given time of day. I am generally concerned for my safety and of my dog's while trying to cross the street with cars that drive far too fast and disregard pedestrians. 2 Also, the co-op has a gated parking lot with an entrance/exit onto Horton Street, which also already proves to be hard to turn in and out of. I can only imagine that this will get worse with more cars that will be using Horton as a main thoroughfare. Furthermore, there are various driveways that empty onto Horton street and I feel that the EIR does not take these pre-existing driveways into account and does not address the impact that future tenants and visitors will have. There is a lack of completeness of the traffic study and needs to be redone. 3

Parking:
Outside of the handful of live/work and condo spaces around the Sherwin Williams development, the area is comprised of company HQs and businesses. Currently, parking is already tight (people already always park in front of my garage door) so I ask that the EIR look into the current street parking issues and ask that the new development offer 2 parking spots per unit as most households are a 2+ car type of household. 4

Hazardous Waste/Safety:
Though the Sherwin Williams site has been "cleaned up" many years, I ask that the EIR further look into the clean up and the safety of the neighborhood once the digging/building starts. Currently, the site has a massive concrete layer behind the Sherwin Williams building, which to me seems like it hasn't fully been cleaned up and chemicals and toxins will be released once this concrete is excavated. The safety of the neighbors and the potential workers must be taken seriously here 5

Noise:
The EIR does not take into account that MANY of the surrounding buildings are live/work spaces, which means that we will be subject to all of the construction process **24 hours a day for 3-5 YEARS**. From the largest noises of drilling, jack hammering, and tractors to the smallest noises like the beeping of large trucks backing up -- we will hear it all. Our buildings are old and sound and air travel easily through the walls. Furthermore, many of the studios get light and ventilation through their skylights. We unfortunately don't have the leisure of "heading home" after 8 hours of this noise. The EIR needs to further examine the noise impact because it will be more than significant for the people living here. 6

Density:
I am largely concerned with the density of the development and the impact that it will have. A lesser dense project will certainly have less impact on some concerns like traffic and parking. Since the proposal of the 7

project and this first EIR, new laws have been enacted that require family friendly/affordable housing for any development to achieve a density bonus. Based on the proposed project and this new law, the project simply does not meet these requirements and cannot be built. The developers need to go back to the drawing board to propose a new development and then get a new EIR pertaining to a project that can actually be built. **7 cont.**

As stated, I am not opposed to a new development though I want it to be what is best of the neighborhood and the people who have to live through it. I ask that they density be revisited, that commercial/retail spaces be affordable and cater towards local small businesses, and that the safety of the neighbors is properly assessed. I ask that the EIR take into account not just the environmental impacts of this development but the impact that it will have on the people who live here. The EIR is incomplete, flawed, draws erroneous conclusions and needs to be redone. I hope that everyone can ask themselves "Would I want to live in a development like that?" This should not just be about building a development but rather building a community. **8**

Thank you,
Erin Fong
45th Street Artist Cooperative

COMMENTER C13

Erin Fong
March 8, 2016

Response C13-1: This comment is introductory in nature. Please see Responses C13-2 through C13-8 that address concerns raised by the commenter.

Response C13-2: This comment is an observation regarding the existing traffic conditions on streets adjacent to the project site. It does not pertain to the analysis or information within the Draft EIR; no further response is required.

Response C13-3: The proposed 46th Street roadway through the project site would intersect Horton Street in the vicinity of the 45th Street Artists' Cooperative and operations of this driveway were included in the assessment. With the addition of project traffic from the proposed project, vehicles waiting to turn from the side street would have an average delay of 16 seconds during the PM peak hour. At other times of day, delay would be less. Traffic from other approved and pending projects could further increase delay.

Traffic from other existing driveways along the corridor was considered in the analysis of intersection operations.

With development of the project, additional pedestrian amenities in the area would be provided, including new sidewalks and pedestrian crossings.

Response C13-4: The project will provide parking per the current City Code requirements, which requires one parking space per unit, plus 0.20 spaces per unit for guest parking. All residential parking will be unbundled from the rent cost to encourage lower rates of vehicle ownership within the residential portion of the project. A car share pod will be located within the project site to provide future residents access to a vehicle when needed, but without the cost of vehicle ownership. The project will also be required to implement a TDM program to manage the proposed parking supply, with provisions for on-going monitoring and plan refinement.

Providing two parking spaces per residential unit could incentivize lower parking prices within the development, which could lead to higher rates of vehicle ownership within the development, and higher rates of vehicle traffic on the surrounding streets.

Response C13-5: Water, soil and air contaminants were evaluated in the Draft EIR. Toxic air contaminants were evaluated within the Draft EIR starting on page 213 of the Draft EIR. Page 317 of Draft EIR acknowledges that soil and groundwater impacted with hazardous materials may be disturbed and/or removed as a result of construction activities, which poses a potential health risk to

construction workers, who would potentially come into direct contact with or inhale dust or vapors from contaminated soil and groundwater, as well as the nearby public, who could be affected by contaminants in fugitive dust or vapors from the project site. Additionally, if impacted soil and groundwater were improperly managed and disposed of during construction, they could be released into the environment and pose a potential risk to future site occupants, other members of the public, and the environment. Compliance with the restrictions and requirements of the LUC for the Sherwin-Williams parcel and implementation of the SMP that would be developed for the proposed project would prevent potential exposure of construction workers, the public, and the environment to known and potential unidentified hazardous materials in the subsurface of the Sherwin-Williams parcel, including potential unidentified areas of hazardous materials impacts beneath the Building 35 concrete pad. See Response A2-6 and the responses to the DTSC letter A4. No further analysis in the Draft EIR is necessary.

Response C13-6: It should be noted that construction would not occur "24 hours a day"; as described in Mitigation Measure NOI-3, general construction noise on private and public projects shall be limited to weekdays from 7:00 a.m. to 6:00 p.m. The loudest activities shall be limited to weekdays from 8:00 a.m. to 5:00 p.m., as stated in the City's Municipal Code.

Response C13-7: Please see Master Response 2 regarding the Development Bonus.

Response C13-8: Much of this comment relates to the design of the project, including proposed density and composition of future retail/commercial space. The comment includes a concern of the "safety of the neighbors," but it is unclear what the commenter is referring to. Air Quality impacts are evaluated in Section IV.D, Air Quality, of the Draft EIR, and potential hazardous materials impacts are evaluated in Section IV.I, Hazards and Hazardous Materials, of the Draft EIR.

The comment includes the following phrase regarding the Draft EIR: "The EIR is incomplete, flawed, draws erroneous conclusions and needs to be redone." The commenter does not provide specific instances of perceived deficiencies in the Draft EIR to which specific responses can be provided. Please see Responses C13-1 through C13-7 that address comments included in the commenter's letter.

burke
BURKE, WILLIAMS & SORENSEN, LLP
1503 Grant Road - Suite 200
Mountain View, California 94040-3270
voice 650.327.2672 - fax 650.688.8333
www.bwslaw.com

Letter C14

Direct No.: 415.655.8115
ashimko@bwslaw.com

March 8, 2016

Miroo Desai, Senior Planner
City of Emeryville
Planning & Building Department
1333 Park Avenue
Emeryville, CA 94608

Re: Comment on Sherwin Williams Development Project Draft EIR; SCH #2004122083

Dear Ms. Desai:

We are writing on behalf of our client, the applicant for development of the Sherwin Williams site, and appreciate the opportunity to submit comments on the Draft EIR for the Sherwin Williams Development Project (the "Project"). The City and its consultants have done an admirable and thorough job producing a well-written, informative, fair and balanced analysis of the proposed Project and its alternatives. Our comments are limited to the following topics: (1) changes to the Draft EIR warranted by recent Supreme Court case law, (2) a requested minor clarification to one mitigation measure, and (3) information concerning the feasibility of alternatives. **1**

1. Changes Due to CBIA v. BAAQMD Decision

The Draft EIR was published prior to the California Supreme Court issuing its key decision in *California Building Industry Assn. v. Bay Area Air Quality Management District*, 62 Cal.4th 369 (2015) ("CBIA v. BAAQMD"). That decision squarely addressed the question of whether CEQA requires analysis of a proposed project's possible environmental impacts on the project's future residents. The Court found that, in almost all circumstances,[1] CEQA does not require "agencies to analyze the environment's effects *on* a project." *Id.* at 387. Specifically in the context of considering the precise air quality impact thresholds employed in the Draft EIR to evaluate the effects of existing air toxics on future Project residents, the Court held "that CEQA does not generally require an agency to consider the effects of existing environmental conditions on a proposed project's future users or residents." *Id.* at 392. In fact, the Court struck down the **2**

[1] There are stated exceptions, none of which apply here.

Letter
C14
Cont.

following two sentences of CEQA Guideline section 15126.2(a): "[A]n EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazards to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there." *Id.* at 390.

In light of the *CBIA v. BAAQMD* ruling, several impacts identified in the Draft EIR should be removed because they plainly focus exclusively on the effect to future Project residents of existing environmental conditions. These topics are no longer appropriate topics to include within an EIR because CEQA does not recognize these issues as environmental impact areas that may be subject to the imposition of mitigation measures or figure into the consideration of alternatives. The impacts that should be removed for this reason include the following:

2 cont.

> AIR-2: Operation of the proposed project would expose future residents of the project site to toxic air contaminants.
>
> NOI-1: Implementation of the proposed project could result in the exposure of future residents of the project site to excessive noise levels.
>
> GEO-1: Implementation of the proposed project could expose people or structures to strong seismic shaking and related seismically induced hazards, including liquefaction.

We suggest that these impact analyses and the accompanying mitigation measures be stricken from the EIR. If the City desires to do so, the City could include such discussions within Project staff reports for informational purposes and without any language that labels the topics or conclusions as significant environmental impacts, and could recommend the imposition of Project conditions of approval resembling the current EIR mitigation measures.

2. <u>Clarification to Mitigation Measure AIR-2</u>

3

In the event that Mitigation Measure AIR-2 is retained in the EIR as a mitigation measure or a possible condition of approval, we ask that it be modified very slightly in a manner that does not change the performance standard or the results. Based on new Title 24 requirements, we intend to address this issue by providing MERV-11 filtration to all outdoor air (mechanical ventilation) at the residential units. This would be accomplished via a duct routed from the return side of the ceiling mounted fan coil to the exterior of the building. A MERV-11 filter box would be installed in line with this duct along with a supply fan to overcome the pressure drop of this filter. The filter box would be installed in a concealed location such as a closet. We believe

Letter C14 *Cont.*

that this air filtration system would meet the performance standard set forth in the mitigation measure (which would continue to pertain) and ensure that sensitive receptors would be protected from air toxics in the environment. In order to allow flexibility for the systems to affect either outdoor air or indoor air so long as the standards are met, please remove the word "indoor" in the first and second sentences of Mitigation Measure AIR-2. **3 cont.**

3. Alternatives

We suggest that the City coordinate with staff of the Department of Toxic Substances Control (DTSC) in order to assess the legal, technological and social feasibility of the Reduced Density Alternatives (Variants 1, 2 or 3). There is a high permeability backfill area located under Parcel A5 and, according to the deed restrictions imposed by the DTSC, no building may be placed in this area. DTSC staff has indicated that the Reduced Density Alternatives could negatively impact or violate the existing remediation controls that were developed to protect human health and are mandated by law and thus, each of these alternatives may be infeasible. Please confer with DTSC and incorporate any resulting information and feasibility determinations into the EIR. **4**

Thank you for the chance to submit these comments. Please do not hesitate to contact me with any questions.

Sincerely,

Anna C. Shimko

ACS:gmf

COMMENTER C14

Anna C. Shimko
March 8, 2016

Response C14-1: These comments are introductory in nature and generally describe the commenter, the commenter's support of the EIR findings, and the content of the letter. This comment does not specifically address information or analysis within the Draft EIR; no further response is required.

Response C14-2: The City as CEQA Lead Agency has determined that the potential impacts to future residents related to Air Quality, Noise and Geology are appropriately identified in the Draft EIR. As the courts give deference to the lead agency in the establishment of in significance thresholds, the Draft EIR analyses of these potential impacts is appropriate and important to be retained within the Draft EIR and provided to the decision-makers when deliberating on the project's potential effects.

Response C14-3: Suggestions to clarify Mitigation Measure AIR-2 would not change the performance standards or mitigated impact levels.

On page 219 the Draft EIR is revised as follows.

> Mitigation Measure AIR-2a: To reduce health risk levels for future residents of the project site, the project applicant shall provide an air ventilation system with filtration that can remove particulate matter from indoor air to a level sufficient to achieve compliance with the BAAQMD threshold. To reduce health risk levels for future residents of the project site, the control efficiency must result in a reduction of 60 percent of particulates of 2.5 microns or less, such as Minimum Efficiency Reporting Value (MERV)-11 filters or other indoor air filtration systems. This reduction could be accomplished via a duct routed from the return side of the ceiling mounted fan coil to the exterior of the building. A MERV-11 filter box could be installed in line with this duct along with a supply fan to overcome the pressure drop of this filter. The filter box would be installed in a concealed location such as a closet. This measure ~~which~~ would reduce the maximum single source carcinogenic health risk level for future residents to 8.4 (which would be below the BAAQMD's significance criteria of 10). The ventilation system shall be certified to the satisfaction of the City to achieve the stated performance effectiveness from indoor areas.

Response C14-4: The commenter suggests that the City coordinate with DTSC to assess the legal, technological, and social feasibility of the Reduced Density Alternatives (Variants 1, 2, or 3). The commenter indicates that according to

the deed restrictions imposed by DTSC, no building may be placed in the area of high permeability backfill located under Parcel A5. The commenter indicates that DTSC staff has indicated that the Reduced Density Alternatives could negatively impact or violate the existing remediation controls that were developed to protect human health and are mandated by law and thus, each of these alternatives may be infeasible.

The Land Use Covenant (LUC) for the Sherwin-Williams parcel does not indicate that buildings cannot be placed in the area of high permeability backfill. The LUC prohibits any use of the Sherwin-Williams parcel which may adversely affect the integrity and effectiveness of the Installed Remedial Features (which includes the high permeability backfill) and any construction or other development activities that are inconsistent with the Installed Remedial Features. The LUC also indicates that activities that may disturb, alter, or remove Remedial Features shall not be permitted without prior written approval by DTSC.

The high permeability backfill area is located under a portion of Parcel A5 under Reduced Density Alternatives Variants 1 and 2, and is located under a portion of Parcel A4 under Reduced Density Alternatives Variants 3. It is feasible that a building could be placed over the high permeability backfill area if the building foundation and subsurface utilities were designed and constructed in a manner that would not adversely affect the integrity and effectiveness of the high permeability backfill area. The proposed design and construction methods for building foundations and subsurface utilities and the predicted affects they may have on the integrity and effectiveness of the high permeability backfill area would need to be reviewed and approved by DTSC, in accordance with the requirements of the LUC. The high permeability backfill area could potentially be altered if approved by DTSC to account for the placement of a building over the high permeability backfill area to ensure that this Remedial Feature maintains its effectiveness and integrity. As discussed in the LUC, the high permeability backfill area includes a horizontal perforated pipe connected to a rock fill area that can be used to control groundwater flow as a contingency by actively pumping the rock fill area to extract groundwater. This contingent remedial feature, either in its current state or potentially in a modified state approved by DTSC, would continue to be available for use to actively control groundwater flow, if necessary.

DTSC's review and approval of proposed design and construction methods for building foundations and subsurface utilities and the predicted effects they may have on the integrity and effectiveness of the high permeability backfill area, and DTSC's review and approval of potential modifications to the high permeability backfill area, if necessary, to account for placement of a building over the high permeability backfill area would ensure that the integrity and effectiveness of the high permeability backfill area would be maintained and remain protective of human health and the environment.

Letter C15

From: Kevin Ma <Kevin.Ma@lennar.com>
Sent: Tuesday, March 08, 2016 9:15 AM
To: Miroo Desai; Charles Bryant
Cc: Alex Waterbury; Tyler Wood; Brian Davey; Gillian S. Cho; Joe Ernst <jernst@srmernst.com> (jernst@srmernst.com); Anna C. Shimko (ashimko@bwslaw.com); Peter Costa (pcosta@nelsonnygaard.com)
Subject: FW: Sherwin Williams Emeryville TDM
Attachments: Emeryville Lennar Sherwin Williams TDM Plan_Final.pdf

Good morning Charlie and Miroo, as previously discussed we would like to submit the project's current TDM plan as an official comment to the draft EIR. We have had Nelson Nygaard (Pete Costa) work with the traffic model fundamentals from the draft EIR and they have modeled and studied the effects of our proposed TDM mitigations to the traffic trips projected from our project.

As you can see from the TDM plan, Nelson Nygaard's TDM model shows a 17% reduction in both daily and peak hour trips from our project once the TDM measures are implemented. We feel that this is a significant reduction in vehicle trips and should be considered in the overall traffic discussions as the EIR goes into final form. 1

Please let us know if you have any questions and we look forward to the next steps for the EIR. Thanks, Kevin

Kevin Ma
Lennar Multifamily Communities

kevin.ma@lennar.com

From: Peter Costa [mailto:pcosta@nelsonnygaard.com]
Sent: Monday, March 07, 2016 11:45 AM
To: Kevin Ma <Kevin.Ma@lennar.com>
Subject: Emeryville TDM

Kevin,

As discussed, please find the attached TDM plan for your records and incorporation into the response to comments.

Thank you,

-Pete

PETER COSTA, AICP, PTP
Senior Associate
pcosta@nelsonnygaard.com

Nelson\Nygaard Consulting Associates
116 New Montgomery Street, Suite 500
San Francisco, CA 94105
415-281-6939 (direct)
415-284-1544 (main)
www.nelsonnygaard.com

NELSON NYGAARD

Mobility | Accessibility | Sustainability

Emeryville Sherwin-Williams Site Transportation Demand Management (TDM) Plan

March 2016

NELSON NYGAARD

Letter C15 *Attach.*

Table of Contents

Page

1 Executive Summary 1-1
2 Introduction 2-2
city policies and requirements 2-2
Draft EIR Findings 2-2
Project Description 2-3
3 TDM Vision 3-1
Compliance Strategy Goals 3-1
Factors for Success 3-1
TDM Approach 3-2
4 Multimodal Infrastructure 4-1
Vehicular Access 4-1
Pedestrian Infrastructure 4-2
Bicycle Infrastructure 4-3
5 Management and Marketing 5-1
Site-Level Transportation Coordinator 5-1
Transportation Representatives 5-1
Transportation Information 5-2
6 Employee and Resident TDM Measures 6-4
Residents and Employees 6-4
Employees Only 6-6
other tdm considerations 6-7
7 Parking Management 7-9
Parking Ratios 7-9
Unbundled Parking for Residents 7-10
Parking Pricing 7-11
Time Limits 7-11
8 Implementation Timeline 8-1
9 Vehicle Trip Generation from TDM 9-1
TDM Program Effectiveness 9-2
10 Annual Monitoring 10-3
Monitoring Approach and Process 10-3

Table of Figures

Page

Figure 1 Proposed Street Network and Vehicle Access 4-1
Figure 2 Proposed Pedestrian Facilities 4-2
Figure 3 Proposed Bicycle Facilities and Circulation 4-3
Figure 4 Example Transportation Website (Mountain View). 5-3
Figure 5 TDM Strategy Timeline 8-1
Figure 6 Vehicle Trips Generation Estimates 9-1
Figure 7 Estimated Trip Generation with TDM program 9-2

2 cont.

Letter C15 *Attach.*

1 EXECUTIVE SUMMARY

The City of Emeryville requires any multi-unit residential development that consists of 10 or more units is required to meet the Transportation Demand Management (TDM) requirements. The goal of the TDM requirements are to reduce vehicle demand associated with the development project and that a TDM plan must be prepared to include programs and strategies that will be considered by the developer and/or future property management. Importantly, the TDM plan is a living document that may be adjusted and modified as appropriate.

Transportation Demand Management measures typically encourage travelers to utilize alternative modes of transportation, such as induce shifts from single auto occupancy travel to transit, rideshare, bicycle, and pedestrian travel. These measures may also include parking management strategies and coordinate with car share providers to reduce overall vehicular demand (traffic and parking) at the project site.

Lennar Multifamily Communities will implement and/or consider the following TDM and parking programs for the Sherwin-Williams development project in Emeryville; these programs are described, in detailed, in the TDM plan herein:

- Site-Level Transportation Coordinator
- Transportation Representatives
- On-Site Transportation Information
- AC Transit EasyPass Program
- Car Sharing
- Bike Sharing
- On-Site Bicycle Repair Facilities
- On-Site Bicycle Repair Facilities
- Pre-Tax Commuter Benefits
- Ridematching Services
- Unbundled Parking
- Maximum Parking Ratios
- Parking Pricing
- On-Street Parking Time Limits

The TDM plan provides a quantitative analysis to determine the extent to which the TDM programs would reduce the estimated number of vehicle trips associated with the development (as presented in the Public Draft Environmental Impact Report [EIR]). Through a combination of all the TDM programs for the development, it is estimated that implementation of the TDM programs would result in a reduction in daily and peak-hour vehicle trips by approximately 17%. As required by the City, the proposed TDM programs shall be monitored following issuance of a certificate of occupancy and importantly, to determine if the effectiveness of these strategies is growing over time or if adjustments are needed to improve the performance of the overall TDM program.

2 INTRODUCTION

CITY POLICIES AND REQUIREMENTS

The Transportation Element of the City of Emeryville General Plan includes a series of policies related to transportation and circulation, including "quality of service" standards to optimize travel by all transportation modes (Policy T-P-3), encourage development that minimizes Vehicle Miles Traveled (VMT) (Policy T-P-5), and supporting Transit-Oriented Development with reduced parking requirements (Policy T-P-25), etc. Specifically, the General Plan also includes a policy that states "employers in large new development will be required to implement comprehensive Transportation Demand Management (TDM) program for their employees and customers (Policy T-P-65). Other goals embedded in the General Plan include the need for transportation demand management strategies to decrease single-occupant automobile demand and reduce vehicle miles traveled (Goal T-G-11).

Chapter 9-5, Section 9-5.2008 of the City of Emeryville Municipal Code states that any "multi-unit" residential development that consists of 10 or more units is required to meet Transportation Demand Management (TDM) requirements. Specifically, a TDM plan shall be submitted for approval by the Planning Commission or City Council as a part of the approvals process. As codified in the ordinance, the "TDM plan shall ensure that the average vehicle miles traveled (VMT) by residents of the development is less than the average citywide VMT." The TDM plan is also a living document with reasonable strategies to effectively reduce VMT and traffic demand, and the "Community Development Director may require modifications to the plan if it does not appear to be meeting its primary goal."[1]

DRAFT EIR FINDINGS

The Public Draft Environmental Impact Report (EIR) was published in January 2016. The transportation analysis included in the environmental document stated that the project is expected to generate approximately 5,540 weekday daily trips and about 460 morning and 540 evening peak-hour vehicle trips. On a typical Saturday, the project would generate approximately 4,490 vehicle trips, including 430 during the peak hour. However, a number of factors were considered that would reduce the overall number of vehicle trips made by a vehicle to/from the project site, including a number of trips expected to be internal to City of Emeryville as well as walk, bike, or transit trips (the trip generation process and assumptions incorporated into these findings are discussed in more detail in Chapter 8). As a result, the project is expected to generate approximately 3,600 daily vehicle trips, including approximately 280 morning peak hour and 320 evening peak hour trips. On a Saturday, the project could generate up to 3,220 vehicle trips, including 280 peak hour trips.

[1] Chapter 9-5 Citywide Use and Development Regulations, Section 9-5.2008 Transportation Demand Management, Subsection (a) TDM Plan; available online at: http://www.codepublishing.com/CA/Emeryville/#!/Emeryville09/Emeryville095.html; accessed February 23, 2016.

2 cont.

Letter C15 Attach.

The project would result in traffic and circulation impacts that were identified as significant and improvements were proposed to reduce the majority of impacts to a less-than-significant level. Although not stated as a recommended mitigation measure, the Public Draft EIR included a recommendation to prepare and implement a parking and TDM plan. Furthermore, the environmental document states that the project would be compliance with the City's General Plan and related goals by introducing TDM and parking-related strategies as a part of the project.

PROJECT DESCRIPTION

The 10.05-acre project site is located in the City of Emeryville and is bounded by Horton Street to the east, Sherwin Avenue to the south, and Union Pacific Railroad tracks to the west. The proposed development would divide the site into six new parcels, roadways and a park area to construct a mixed-use development. The existing Sherwin-Williams Building on the site would remain and be reused and five new structures would be constructed. In total, the project would include 649,000 square feet of residential space (540 units) and about 94,600 square feet of commercial space. Other amenities would include park and open space, playground, adult fitness space and a central green.

3 TDM VISION

Lennar Multifamily Communities has committed to a robust and comprehensive package of strategies for Sherwin-Williams development site. It is a significant investment and a demonstration of their commitment to meet, and moreover exceed the city's requirements for the site. Lennar Multifamily Communities recognizes that they are part of the larger Emeryville community and that the Sherwin-Williams development will have significant implications for the future of the city. As such, the TDM plan present herein is designed to go beyond the core objective of reducing vehicle trips and VMT by also ensuring that the strategies contribute to larger city goals related to environmental sustainability, economic development, and quality of life. It is a plan that benefits not just the adjacent environs of the site, but all of the city.

COMPLIANCE STRATEGY GOALS

The primary goals of the TDM plan include:

- Reduce vehicle trips in peak-hours, per city policy;
- Provide additional mobility options for residents, employees, and visitors;
- Attract residents and employees that use alternative modes of transportation in part to minimize car ownership and project vehicle trips;
- Encourage healthy and sustainable travel; and
- Provide transportation benefits to the surrounding community.

FACTORS FOR SUCCESS

In order for the TDM plan to be successful, a number of factors are important. First, the TDM plan must leverage the substantial investment in transportation infrastructure made by Lennar Multifamily Communities, particularly new bicycle and pedestrian facilities. It is these backbone infrastructure investments that will make the TDM programs implementable.

Second, the TDM plan should be actionable. It proposes a set of strategies that are operationally and financially realistic, enabling the plan to get "off the shelf".

Third, it is important to consider not just the individual strategies, but how they complement each other in a coordinated package. The TDM plan is designed with the understanding that each component is needed to maximize trip reductions.

Fourth, a comprehensive parking management plan that prioritizes resident, employee and visitor convenience and effective utilization of the site's parking supply will be crucial to achieving the City's transportation, economic, and sustainability goals.

Therefore, the trip reduction goals need to be phased in so that they remain realistic and achievable. No TDM plan is perfect on day one and monitoring of the programs is essential. Adjustments will be made to better tailor programs to actual usage and the evolving demographics of the site.

2 cont.

Letter C15 *Attach.*

Finally, Emeryville's traffic and transportation challenges are systemic and extend far beyond this project. Vehicle capacity constraints at the city's corridors may continue to be an issue whether project is developed or not. Therefore, the TDM plan should be evaluated in the context of the need to develop a coordinated, citywide trip-reduction and mobility strategy.

TDM APPROACH

The project would support larger City goals, objectives and policies related to reducing auto traffic and creating a multimodal environment. The TDM plan herein supports current project design and transportation components identified in the Public Draft EIR and this plan is to compliment these transportation improvements. In addition, this TDM plan specifies how demand management strategies can actually be applied in the real world, how they can quantifiably reduce auto traffic demand and how these strategies can be measured. The TDM plan herein focuses on five overarching strategies and these are outlined in the following chapters:

- Multimodal Infrastructure
- Management and Marketing
- Employee and Resident Strategies
- Parking Management
- Monitoring

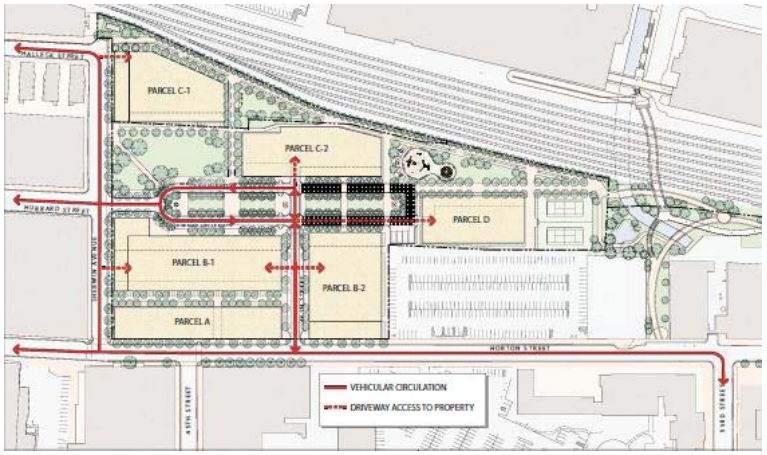
4 MULTIMODAL INFRASTRUCTURE

The project would include a considerable level of investment in new multimodal infrastructure to support active transportation for future residents, employees and visitors as well as the surrounding neighborhood. These investments will significantly improve transportation access and connectivity at and adjacent to the project site. Most importantly, it is these infrastructure investments which will enable the TDM programs to be successful and achieve ways to reduce vehicle trips.

VEHICULAR ACCESS

Vehicular infrastructure would include the use of existing street network and an extension of Hubbard Street into the project site. The creation of a central street ("Hubbard Circle") would be located within the center of the site and comprise a space 125 feet wide and 300 feet long and allow for traffic to flow in a one-way circle within the site (forming Hubbard Circle East and Hubbard Circle West)), surrounding the central green. The new Hubbard Circle would comprise a 20-foot lane for vehicular and bicycle movement, as well as sidewalks. An additional connection eastward to Horton Street from Hubbard Circle by the extension of a new 46th Street is also proposed. This new street would provide for pedestrian, bicycle and vehicular movement as well as access to the development parcels. Figure 1 illustrates the proposed vehicular circulation plan.

Figure 1 Proposed Street Network and Vehicle Access



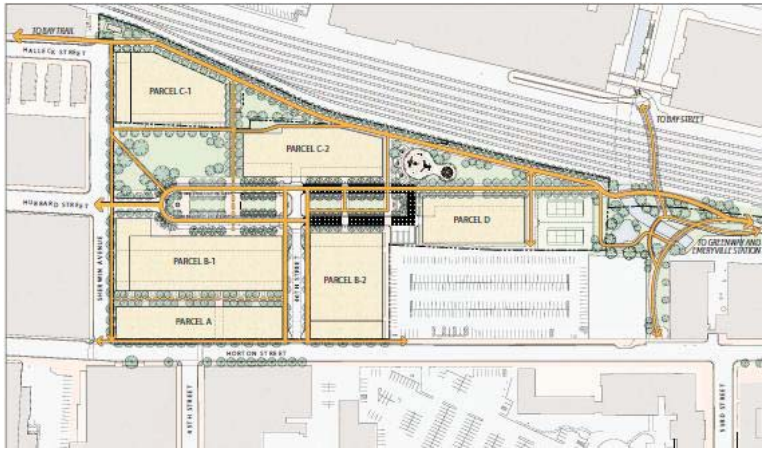
2 cont.

Letter C15 *Attach.*

PEDESTRIAN INFRASTRUCTURE

Pedestrian circulation within the project site would be along new roadways. Sidewalks would be included along all interior roadways and additional pedestrian pathways would be located throughout the site. Pedestrian crosswalks would be provided at intersections and STOP signs would be provided at the Hubbard Street intersection with Sherwin Avenue and at the new 46th Street intersection and Hubbard Circle in the east-west direction of travel. The pedestrian facilities would also provide a connection to the Bay Trail, Emeryville Greenway and Emeryville Amtrak Station, and across to Bay Street. Figure 2 illustrates the pedestrian infrastructure plan.

Figure 2 Proposed Pedestrian Facilities

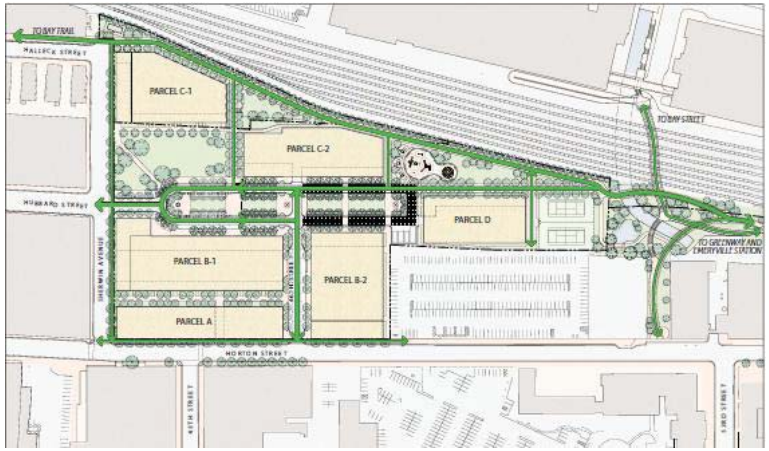


BICYCLE INFRASTRUCTURE

Bicycle Facilities

Bicycle circulation within the project site would be along new roadways. Bicycle paths would be provided along the western boundary of the project site (adjacent to the railroad tracks) to connect to the Emeryville Greenway and Bay Trail and along other proposed pathways within the site. The proposed bicycle facilities would comprise Class II (striped bike lanes) and Class III (signed routes without lanes). Figure 3 illustrates the bicycle infrastructure plans.

Figure 3 Proposed Bicycle Facilities and Circulation



Secure Bicycle Parking

Commuting by bike can be a significant financial investment for many. As such, even a small chance of theft can reduce bicycle commuting when all parking options leave bikes exposed to the elements. Sheltered parking and bicycle lockers also offer more protection from theft and vandalism when compared to standard bicycle racks.

The project would include secured, on-site bicycle parking space for residential and commercial uses. On-site bicycle parking would be provided in the parking garage.

2 cont.

Letter C15 *Attach.*

5 MANAGEMENT AND MARKETING

Effective marketing and management of the TDM programs are essential to their success. If residents, employees, and the general public are unaware of the available transportations options and programs, they will not take advantage of them. Ongoing and tailored marketing efforts will be needed to ensure that programs are well utilized. Similarly, active management of the TDM programs by dedicated staff is needed to implement, tailor, and refine the programs and services to best meet the needs of the community.

SITE-LEVEL TRANSPORTATION COORDINATOR

Description: Lennar Multifamily Communities, or the relevant property manager, will designate one staff member or a consultant as the Transportation Coordinator. This position will have the authority to implement TDM strategies and oversee the management and marketing of TDM programs. The Transportation Coordinator will be responsible for developing information materials, managing transportation services offered as part of the TDM program, monitoring results, and coordinating with City staff and on-site representatives.

Action: In the initial implementation stages, a Transportation Coordinator will be hired at a 50% time commitment out of a 40-hour work week. Once the various programs are in place and informational materials have been created the time commitment could be reduced to 25% - 50%.

TRANSPORTATION REPRESENTATIVES

Description: For the residential component of the project, an on-site staff member of either the property management team or resident association would be designated as a Transportation Representative. As needed, the representative would work with the Transportation Coordinator to facilitate communications and program implementation with residential tenants.

Since many of the commercial-flex uses at the project site will be small businesses, a commercial tenant association will be created, which would have one representative to coordinate TDM implementation for all tenants. The commercial Transportation Representative will provide employees with a point of contact for any transportation related questions, and will work with employees to find transportation alternatives to driving alone to the site. The TDM Representatives will be responsible for distributing materials to residents/employees, promoting the use of alternative modes of transportation, and interacting with residents/employees.

Action: Require as part of any leasing agreement and designate a Transportation Representative for each residential building as they are completed. For all commercial uses, establish a commercial tenant association. As part of any lease agreement each commercial tenant will be required to join the association.

TRANSPORTATION INFORMATION

Description: Information on transportation options and/or links to the appropriate website will be conveyed to all prospective residential tenants and all prospective employees who receive an offer to work within the development. It will also be included as a component of resident and employee welcome packets or employee orientation. Furthermore, information and/or links will be posted in prominent locations for all residents and employees, such as apartment lobbies or lunchrooms.

Lennar Multifamily Communities will be responsible for developing marketing/informational materials and determine if there are additional supplemental materials that they should create. Keeping information and materials updated and relevant will also be required on a routine basis to ensure residents and employees are receiving the most up-to-date information.

Relevant information will be distributed in a number of different ways:

Resident and Employee Handbook

At the beginning of the year, an up-to-date transportation handbook will be distributed electronically to all new and existing employees and residents. This information should also be posted on the project website. The handbook or web-based tool should include the following information:

- Transportation Coordinator and Representative contact information
- Commute trip planning information, including links to the 511 Rideshare program
- Subsidies or financial incentives provided through the TDM program
- Walking and biking routes within the area, including estimated walk and bike times to key locations and a link to the East Bay Bike Coalition bike map
- Local transit options and schedules, including links to AC Transit schedule/route maps and the online BART schedule and trip planner app

Website (initial) and Smartphone App (long-term)

Creating a website or smartphone app that serves as a comprehensive source of transportation and TDM information has proven highly effective in raising awareness of alternatives to drive-alone mobility and commute options. Such tools can provide specific information on costs, benefits, and multimodal options available to employees and residents as well as links to citywide or regional information. Figure 4 on the following page is an example of these types of websites.

As feasible in the long-term, a smartphone app should be developed by Lennar Multifamily Communities to provide transportation information for the cities of Emeryville and Oakland.

2 cont.

Letter C15 *Attach.*

Figure 4 Example Transportation Website (Mountain View)

www.mvgo.org

Transportation Information Kiosks

The development should have locations at which both residents and employees can obtain the transportation information. Information posted at these sites could include a link to the website or electronic tool, and contact information for the Transportation Coordinator and Representatives. Information may also include train and bus schedules, information on the 511 Rideshare program, and transit pass programs.

Given the size and layout of the site, information would need to be posted at more than one location in order to be easily accessible for both residents and employees. These boards would be maintained and updated as needed by the Transportation Coordinator. Where feasible, this information should be provided on electronic screens to enable updated information to be provided without the need to replace print materials.

Actions: Lennar Multifamily Communities will develop informational materials related to transportation. These materials will be disseminated via the employee and resident handbook and posted in kiosks or on electronic screens in the lobby of each residential building and in several additional locations throughout the site for employees and visitors. Materials will be kept up-to-date and residents and employees will provided with the most current program information on a routine basis.

6 EMPLOYEE AND RESIDENT TDM MEASURES

This chapter describes the TDM measures and policies Lennar Multifamily Communities will either implement or encourage as part of the development of the project site. Since some of these measures will require coordination with and the input of the City of Emeryville and future tenants, the exact parameters of a given measure may evolve over time or be determined at a later time.

Resident and employee TDM measures and policies are grouped into three categories: 1) those measures that apply to residents and employees; 2) resident-only programs; and 3) employee-only programs. For each measure, an explanation of the policy or program is provided, as well as a detailed description of what Lennar Multifamily Communities will provide.

RESIDENTS AND EMPLOYEES

AC Transit EasyPass

Description: Universal transit pass programs are different from traditional financial incentives because the employer or property owner purchases a pass for all residents/employees/tenants, regardless of whether they currently ride transit or not. These passes typically provide unlimited transit rides on local or regional transit providers for a low monthly fee; a fee that is lower than the individual cost to purchase a pass as a bulk discount is given. Such programs are highly cost-effective subsidies.

Universal transit pass programs are more effective at reducing vehicle trips than a standard transit subsidy. By providing all employees and residents with this pass, those who currently do not use transit will often try taking transit since there is no cost barrier to do so. AC Transit currently offers a universal transit pass for both residential developments as well as employers, called the EasyPass[2]. EasyPass will be provided via the regional Clipper Card. The Transportation Coordinator will be responsible for ensuring a registration and sign up process with AC Transit and the Clipper Card.

The AC Transit EasyPass Program is very effective at capturing transit mode share and promoting the use of local and regional transit service for employees and residents within East Bay communities that are served by AC Transit and other regional providers. Based on recent communication with AC Transit staff, approximately 50% of participants currently subsidized by the EasyPass Program (e.g., employer or building management company finances and distributes the passes) shift their primary mode choice to public transit. In the event the passes become a direct out-of-pocket expense to EasyPass participants (e.g., employees/residents responsibility to continue payment of the discounted passes), approximately 25% of participants continue to shift their primary mode choice to public transit, and rely less on private auto or other means of transport.[3]

[2] www.actransit.org/rider-info/easypass

[3] Information provided based on communication with Cleo Goodwin, AC Transit Senior Marketing Representative.

2 cont.

Letter C15 Attach.

Action: The initial proposal is for Lennar Multifamily Communities to provide an AC Transit EasyPass for all employees and all residents, regardless of whether they currently ride transit. Providing the free pass to everyone is the best way to incentivize non-riders to begin using transit. In future years, this program could be revised depending on program performance.[4]

Car Sharing

Description: Car sharing programs allow people to have on-demand access to a shared fleet of vehicles on an as-needed basis. Car sharing has been shown to significantly reduce vehicle ownership and vehicle miles traveled (VMT). Car sharing provides employees with access to a vehicle for mid-day trips, reducing the need to drive their personal vehicle to work. For residents, car sharing increases the vehicle availability for non-car owners, and reduces the need for households to own more than one vehicle.

A Transit Cooperative Research Program (TCRP) publication "Car-Sharing: Where and How it Succeeds" provided a comprehensive evaluation of the effects of car sharing programs throughout the U.S. and importantly, the effects on users of such programs. The empirical study findings indicated that on average, about 20 percent of car sharing members give up their car (or a second or third vehicle) and about 40 percent of members forego purchasing a new car. The report also discusses the financial incentives or cost savings for developers by installing car share parking spaces. Providing car share parking spaces can reduce the overall need for parking spaces and because there is a cost associated with each parking space, reducing the number of parking spaces would reduce the overall project operating and maintenance costs. Therefore, such cost saving for developers can be reallocated to an investment in car sharing and related membership for future residents and businesses on the property.[5]

Two potential operators are City CarShare[6], which currently operates in Oakland and Berkeley, and may be open to expanding into Emeryville, and Zipcar[7], which operates throughout the East Bay. Other car share services, such as point-to-point or peer-to-peer, are encouraged by the developer and the City, but their deployment on Emeryville would ultimately be driven by the private vendor.

Action: Prior to the completion of the first phase, Lennar Multifamily Communities will work with a car share operator to locate one or more vehicles on-site. Key program considerations include:

- Vehicles should not be reserved for residents or employees, but available to general public. As such, vehicles should only be located in publicly accessible locations.
- Allow car sharing vehicles to be located in both on- and off-street parking spaces to increase their visibility and access. This provision would require revision to the City zoning code.
- Maintain flexibility to increase the number of vehicles as development occurs.

Lennar Multifamily Communities will continue to work with the private operators to provide additional vehicles as the site is developed and demand warrants additional vehicles. The type of vehicles provided will ultimately be determined by the car share provider; however Lennar Multifamily Communities will work with the provider(s) to provide a range of vehicle types.

---

[4] Lennar Multifamily Communities is currently coordinating with AC Transit and establishing an AC Transit EasyPass program for future residents and employees of the site. Cost estimates have been provided by AC Transit which estimates that the annual per participant for the development would be approximately $94.30 and an overall estimated annual cost of $47,224 per program year. It is noted that Lennar Multifamily Communities would be responsible for payment of the program until the development is turned over to the new property management.

[5] Transportation Cooperative Research Program (TCRP) Report 108, *Car-Sharing: Where and How it Succeeds*, 2005.

[6] www.citycarshare.org

[7] www.zipcar.com

Bike Sharing

Description: Bike share systems provide a network of public bicycles from dispersed self-service bike share stations. Similar to car sharing, members can check out a bicycle, ride to their destination, and return the bicycle to any bike share pod in the system. For convenience, bike share systems typically provide real-time information on the status of available bikes and empty docks through the web, kiosk, and/or mobile applications. In order to increase accessibility and efficiency, bike share programs are typically provided as a dense network of stations across a city, region, or on a district-wide level.

Bay Area Bike Share[8] is currently exploring expansion into the East Bay, and there may be an opportunity to partner to bring that system to the project site by the time of project completion.

Action: "Loaner" bikes will be offered free of charge to residents and employees and, if Bay Area Bike Share is a viable option at the project site, Lennar Multifamily Communities will work with the planning staff to determine the best locations for pod placements. Given administrative costs, a loaner bike system would be exclusive to employees or residents, providing a free option to ride throughout the project site and the surrounding area. Such a system will require a check out procedure to limit theft and damage, as well as providing helmets and locks as part of the rental. Initial size of such a system will be approximately 50 bikes. A third party provider, such as Zagster[9] may be used to manage the bicycle fleet and employ smart bicycles to provide usage metrics.

On-site Bicycle Repair Facilities

Description: Providing basic tools for keeping bikes in good working order can encourage commuters to try biking to work, and keep them riding. Bicycle repair facilities, such as hand tools and an air compressor for tires, are a small investment that can keep bicycles in circulation and maximize bicycle trips.

Action: Do-it-yourself bicycle repair stands will be provided, including tire gauges, air pumps, wrenches and other tools for minor repairs in each secured parking facility that serves residents and employees.

EMPLOYEES ONLY

Transit Subsidy

Description: While the AC Transit EasyPass will be a viable transit option for commute and recreational trips, BART and the San Francisco Bay Ferry[10] provide additional connections to San Francisco and the larger region outside of the AC Transit service area.

Providing an additional monthly transit subsidy (in addition to the EasyPass) will encourage employees to use transit, particularly for those persons for whom their work or recreational trip cannot be completed on AC Transit service alone.

Action: Lennar Multifamily Communities will provide employees who take transit with a Clipper Card that will be loaded with $50 per month[11] to be used on the transit operator of their choice. Employees will need to notify the Transportation Coordinator and sign up to participate in this program.

---

[8] www.bayareabikeshare.com

[9] www.zagster.com

[10] Operated by the Water Emergency Transportation Authority, or WETA. http://sanfranciscobayferry.com/weta

[11] Subsidy amount subject to change based on demand, effectiveness in meeting trip targets, and financial resources.

2 cont.

Letter C15 *Attach.*

Pre-tax Commuter Benefits

Description: Pre-tax commuter benefit programs allow employees to pay for transit passes with pre-tax earnings and can help encourage transit use among employees. Employees are given vouchers as a substitute for taxable salary. Employees can redeem vouchers for transit passes at sales offices, retail sales outlets, or online to have passes mailed to them or loaded onto a Clipper Card.[12] By substituting taxable salary for a tax-free voucher, employees can save 40% in after-tax value while the employer can save 10% in payroll-related costs. These benefits are offered at the federal tax level[13] and are available to employers of any size. One example is the Commuter Checks[14] program. Another example is the Federal Bike Commuter Benefit[15] which lets bike commuters receive up to $20 per month as a tax-free employer subsidy for riding to work. This benefit cannot be used in combination with the pre-tax transit benefit in the same month.

Action: Commercial lease agreements will be required to contain language requiring commercial tenants to provide their employees with a pre-tax commuter benefits program. The Transportation Coordinator can assist employers with set up and implementation of these programs.

Ridematching Services

Description: One of the greatest impediments to carpool and vanpool formation can be finding suitable riders with similar work schedules, origins, and destinations. Facilitated rideshare matching can overcome this obstacle by enabling commuters who are interested in ridesharing to enter their travel preferences into a database and receive a list of potential rideshare partners. The success of these programs is largely determined by the number of participants and, in turn, the number of potential matches that can be made.

Action: The Transportation Coordinator will facilitate ridematching for residents and employees. Initially, existing programs such as 511.org can be utilized to facilitate carpooling. However, as the project site develops, the Lennar Multifamily Communities should consider developing an "internal" ridematching system, as people are hesitant to rideshare with strangers. By creating a pool of rideshare partners that are from the same development, people may be more comfortable sharing a ride.

Depending on the system used, it is possible for participants to share information about themselves, which can also help facilitate matches. For example, Hovee (www.hov.ee) ridematching services allows participants to create profiles, that can be viewed by other participants, helping them to determine if this would be a person that they would feel comfortable carpooling with.

OTHER TDM CONSIDERATIONS

The following TDM strategies are currently being considered by Lennar Multifamily Communities, the City of Emeryville, and other agencies. It is noted that no detailed plans or related actions have been developed and prior to implementation of these potential strategies will require additional analysis and coordination. However, these potential strategies are provided in this TDM plan to acknowledge that

[12] For more information on how Clipper Card works with Commuter Checks go to https://www.clippercard.com/ClipperWeb/commutercheck.do

[13] For more information on federal tax regulations go to http://www.irs.gov/pub/irs-pdf/p15b.pdf

[14] Commuter Benefit Solutions https://www.commutercheckdirect.com/ is a third party vendor than can oversee a commuter checks program

[15] For more information go to http://transerve.dot.gov/docs/bicyclepolicy.pdf

other area-wide TDM strategies that affect both the project site and surrounding neighborhood may be considered in the future.

- **Emery-Go-Round Route Expansion/Modification**: The expansion and/modification of the current Emery-Go-Round bus transit route to operate adjacent to the project site and addition of bus stops at the site would provide increased transit access to other regional transit operators (e.g., BART, AC Transit). The Emery-Go-Round route currently stops on Hollis Street, about 700 feet from the project site. This strategy could include adding a route along Horton Street or 45th Street adjacent to the project site, or expanding the current service route to operate along Horton Street and/or 45th Street. Additional coordination with the City of Emeryville and technical analysis (including capital/operating costs, ridership forecasting, etc.) would be required to fully examine the effectiveness of this TDM strategy.
- **Petition for Bay Area Bike Share Pod:** The San Francisco Bay Area Bike Share is currently expanding and increasing the number of bike share bicycles and pods (stations) all over the area, including the East Bay. Approximately 100 Bay Area Bike Share bicycles will be located in Emeryville. The exact location of the new bike share locations has yet to be determined[16]. However, Lennar Multifamily Communities may consider petitioning for a bike share pod (and bikes) to be located adjacent to the project site and a nearby location that is accessible for residents and employees of the project as well as the surrounding community.

[16] Information on San Francisco Bay Area Bike Share Program is available online at: http://www.bayareabikeshare.com/expansion#ExpansionFacts; accessed February 28, 2016.

2 cont.

Letter C15 Attach.

7 PARKING MANAGEMENT

Sufficient automobile parking is necessary for the successful development of the project. However, too much parking can encourage traffic, limit the ability to reduce vehicle trips, increase project costs, and impact site design and aesthetics. Finding the right balance needed to support the City's goals is critical, particularly given that parking is an expensive resource. The role of parking and parking management is also a key element to helping Lennar Multifamily Communities reduce vehicle trips. If free and unregulated parking is provided, there is little incentive for many employees and residents to use alternatives modes of transportation.

The parking management strategies presented in this chapter are designed to help ensure there are enough parking spaces to support functioning of the site, while not providing more parking than necessary. Balancing these factors will help achieve trip reduction goals, reduce development costs, and support the success of a pedestrian-friendly environment. A combination of some or all of the strategies below may be appropriate.

PARKING RATIOS

Description: Emeryville's zoning provisions include both minimum and maximum parking requirements. The minimum number of parking spaces required are to be 33% less than the estimated parking demand and the maximum number of parking spaces required are to be 10% more than the estimated parking demand. For residential uses the overall parking requirement is one parking space per unit and for retails uses the parking requirement is three spaces per 1,000 square feet. In addition, local-serving uses of less than 5,000 square feet are not require to provide off-street parking and the first 1,500 square feet of each commercial use is exempt.

The zoning code also prioritizes the provision of a public pool of shared parking. It is recommended that the site plans provide as limited parking as feasible. Public parking supply should also be included in the initial development and retail/commercial should be "shared" and not reserved to a particular tenant or building.

Action: Per the current development plan and to meet the City requirements, the project would be required to provide between 598 to 983 parking spaces, depending on the build design.

Per the current development plan, off-street parking spaces will be provided in a parking garage with a total of 929 to 982 off-street parking spaces for residential, commercial and retail uses.

Short-term and long-term bicycle parking is required for the project. Per City Code, one short-term bicycle parking space is required per every 10 required vehicle parking spaces, with a minimum of at least two bicycle parking spaces for the commercial portion of the project. Long-term bicycle parking spaces are required at the same rate. Based on these requirements, about 25 short-term and 25 long-term bicycle parking spaces are required for the commercial use. Residential uses are required to provide one short-term for every four visitor vehicle spaces and one long-term space for each unit. As planned, the project

would provide one bicycle parking space per residential unit and provide short- and long-term bicycle parking for employees and visitors of commercial uses.

UNBUNDLED PARKING FOR RESIDENTS

Description: Parking construction and operating costs are generally subsumed into the price of housing. Although the cost of parking is often hidden in this way, parking is never free. Instead, the cost to construct and maintain the "free" parking is included in the cost to buy or rent housing.

The development will provide unbundled parking consistent with the City of Emeryville Municipal Code[17], which includes the following:

- All off-street parking spaces shall be leased or sold separately from the rental or purchase fees for dwelling units for the life of the dwelling units, such that potential renters or buyers have the option of renting or buying a residential unit at a price lower than would be the case if there were a single price for both the residential unit and the parking space(s);
- Cases where there are fewer parking spaces than dwelling units, the parking spaces shall be offered first to the potential buyers or renters of three (3) bedroom or more units, second to potential buyers or renters of two (2) bedroom units, and then to potential buyers and renters of other units;
- Potential buyers and renters of affordable units shall have an equal opportunity to buy or rent a parking space on the same terms and conditions as offered to potential buyers and renters of market-rate units, at a price proportional to the sale or rental price of their units as compared to comparable market-rate units. This stipulation shall be included in any agreement recorded between the City and developer pertaining to the affordable housing units pursuant to Article 4 of Chapter 5; and
- Parking spaces shall be offered only to residents of the dwelling units served by the off-street parking, except that any surplus spaces may be rented out to nonresidents with the provision that such spaces must be vacated on thirty (30) days' notice if they become needed by residents. Required visitor spaces shall not be rented out.

Unbundling requires that off-street parking spaces shall be leased separately from the rental or purchase fees for the individual units for the life of the units. The unbundled parking policy provides a financial incentive to residents to use only the amount of parking they need. For residential development, unbundled parking may prompt some residents to dispense with one of their cars and to make more of their trips by other modes. Among households with below-average vehicle ownership rates (e.g., low-income, students, singles, seniors, etc.), unbundled parking can also provide a substantial financial benefit that increases housing affordability.

The U.S. Department of Transportation Federal Highway Administration issued a recent study that stated the combination of unbundled parking with on-site carsharing vehicle access corresponded to an average vehicle ownership rate of 0.76 per household, which was about a 22% to 32% reduction in vehicle ownership per household, compared to other buildings that had neither carsharing nor unbundling, carsharing only, and unbundling only.[18] As another comparable example, a mixed-use development in St.

[17] City of Emeryville, Site Development Regulations, Chapter 4. Accessed March 2, 2016. http://www.codepublishing.com/CA/Emeryville/html/Emeryville09/Emeryville094.html

[18] U.S. Department of Transportation, Federal Highway Administration, Tolling and Pricing Program: Contemporary Approaches to Parking Pricing: A Primer; accessed online at: http://ops.fhwa.dot.gov/publications/fhwahop12026/sec_4.htm; November 24, 2014.

2 cont.

Letter C15 Attach.

Louis, Missouri and located within one block of a Metrolink Station (light rail) implemented unbundled parking and approximately 20% to 25% of buyers opted to not purchase an off-street parking space.[19]

Action: Lennar Multifamily Communities will unbundle parking for multi-family units and lease those spaces on a month-to-month basis at the appropriate market rate[20]. The cost per space will be reviewed periodically to determine if the price should be increased or decreased to restrict demand to available supply.

Unbundling of parking spaces will be implemented as follows:

- Spaces shall be leased not sold. Month-to-month leases provide flexibility for residents and property owners. Leasing is much easier to manage.
- Leasing rates will be adjusted as needed to manage parking demand. Prices will reflect the market for parking and be used to restrict demand to available supply.
- Where there are fewer parking spaces than units, the parking spaces shall be offered to the potential buyers or renters of the largest units first.
- Potential buyers and renters of affordable residential units have an equal opportunity to buy or rent a parking spaces on the same terms and conditions, at a price proportional to the sale or rental price of their units as compared to comparable market rate units.
- Surplus spaces may be rented out to non-residents or non-tenants with the provision that such spaces must be vacated on 30-day notice if they become needed.

PARKING PRICING

Description: Parking management, and in particular charging visitors and employees for parking, is a key component to managing parking demand and to encouraging the use of alternative modes of transportation. Parking pricing is one of the most significant factors affecting a motorist's choice to drive or travel by another mode.

Action: Lennar Multifamily Communities will implement parking pricing for spaces used for employees and visitors. Public pricing rates will be set to ensure availability and determined based on parking demand and parking behavior. Rates should vary by location and time of day, with hourly rates at a higher rates during peak periods, to ensure parking availability.

Rates should be set at the *lowest* hourly rate to ensure adequate availability per block. Occupancy should be monitored on a consistent basis, and rates should be adjusted to reflect demand. Parking should also be as convenient as possible, and meters should accept multiple forms of payment, including credit cards and pay-by-phone technology.

Revenue generated from pricing of off-street parking will be allocated as a funding source for TDM programs, or other local improvements.

TIME LIMITS

Description: Time limits encourage turnover of parking spaces in commercial areas and discourages employees from parking in spaces directly adjacent to businesses, ensuring greater availability for customers. A wide range of time limits are used for varying circumstances, from 10-minute loading and

[19] Steve Patterson, "Downtown Still Going Strong; Neighborhoods and Inner Suburbs Need Leadership", Urban Review STL, November 20, 2006; accessed online at: http://www.urbanreviewstl.com/2006/11/downtown-still-going-strong-neighborhoods-and-inner-suburbs-need-leadership/; November 24, 2014.

[20] Revenue will be utilized to cover the costs of parking construction and/or ongoing parking operations.

commercial zones to 4- or 6-hour zones. Time limits can be effective where businesses would prefer spaces be made available to customers throughout the day.

Action: Lennar Multifamily Communities will work with the City of Emeryville to determine where and what parking time limits would be beneficial. The location of on-street time limits may include Sherwin Avenue and Horton Street and along new proposed roadways within the project site. This strategy could be used in conjunction with parking pricing.

2 cont.

Letter C15 *Attach.*

8 IMPLEMENTATION TIMELINE

Figure 5 summarizes the implementation timeline for each TDM strategy. In general, the implementation timeline should remain flexible to ensure that strategies and programs are implemented in response to project conditions. Most strategies and programs would be in place on day one, while others would have limited deployment. Many of the employee strategies would be limited in their scope on day one simply because they are estimated to be a small number of employees. All of the strategies and programs would likely grow and evolve throughout the life of the project. For example, limited car share vehicles may be needed initially, but as the site continues to develop additional cars would be needed to serve the increase in residents and employees.

Management of parking is largely to be determined based on market conditions. Pricing, time limits, and permit programs are all potential management tools on day one, but exactly how they are implemented would depend on the specific parking demand and behaviors at the time. Parking policies such as unbundled parking, shared parking, and preferential spaces for ridesharing and electric vehicles would be in place on day one.

Figure 5 TDM Strategy Timeline

Strategy/Program	Is the strategy/program operational on Day One?	Notes
Management and Marketing		
Site-Level Transportation Coordinator	Yes	
Transportation Representatives	Yes	
Transportation Website	Yes	
Transportation App	No	Implemented as demand grows and funding is available.
Transportation Handbook	Yes	
Transportation Information Boards	Yes	
Resident and Employee TDM Programs		
AC Transit EasyPass	Yes	Yes, with potential modifications based on performance
Secure Bicycle Parking	Yes	
Car sharing	Limited	To be expanded as demand warrants

Strategy/Program	Is the strategy/program operational on Day One?	Notes
Bike loaner program	Yes	To be expanded as demand warrants or transitioned to BABS[21]
Bike sharing	No	Integrate with BABS as feasible
On-site Bike Repair Facilities	Yes	
Employee Only TDM Programs		
Clipper Cash Transit Subsidy	Yes	
Pre-tax Commuter Benefits	Limited	
Ridematching services	Limited	
Parking Management		
Shared Parking	Yes	
Unbundled Parking	Yes	Yes, pricing would be adjusted based on market demand.
Parking Pricing	No	Exact pricing structure TBD based on market conditions.
Time Limits	No	TBD based on parking behavior and management plan.

[21] Bay Area Bike Share (www.bayareabikeshare.com)

2 cont.

Letter C15 Attach.

9 VEHICLE TRIP GENERATION FROM TDM

As part of the Environmental Impact Review (EIR) for the Sherwin-Williams Development Project a calculation of future vehicle trips was made for the entire site using a travel demand model. As presented in the EIR, application of the MXD+ model (Fehr & Peers) was used to determine project vehicle trip generation. This model assess trips to more accurately assess the traffic generation of mixed-use and other forms of sustainable development, recognizing that they relate closely to the density, diversity, design, destination accessibility, transit proximity, and scale of development.

In brief, the MXD+ methodology starts with standard, nationwide trip generation rates from the Institute of Transportation Engineers (ITE) trip generation estimates, which are typically conservative as rates are derived from developments in a suburban locations (and thus, generally include higher vehicle demand than developments in more urban areas). These standards rates were then adjusted to account for the mix of uses and environment characteristics around the project site. Use of the MXD+ methodology requires more input data than a traditional trip generation application. Data detailing the geographic layout of the site, land use in the surrounding area, including retail and employment opportunities, and socioeconomic data of both the site and the surrounding area were collected to inform the MXD+ methodology. Sources used to collect this data include the Metropolitan Transportation Commission (MTC) travel demand model, Census and American Community Survey (ACS), the Bay Area Travel Survey (BATS), and the project site plan.

Other key metrics and assumptions used in the modeling effort included average household size, average vehicle ownership per household, employment density, employment within a 30-minute transit trip, intersection density per square mile, and other proposed transportation improvements near the project site, including construction of a bridge connecting to Bay Street and potential for bike share station.[22]

Figure 6 shows the estimated vehicle trips that will be generated by the project at full build out. As shown, the project would result in 3,610 daily weekday trips, 279 morning (AM) peak hour trips and 323 evening (PM) peak hour trips. On a Saturday, the project is expected to generate 3,220 daily trips and 282 trips during the peak hour, respectively.

Figure 6 Vehicle Trips Generation Estimates[23]

Period	AM Peak Hour Trips	PM Peak Hour Trips	Daily Trips
Weekday	279	323	3,610
Weekend	282		3,220

Source: Draft EIR, Table IV.C-7.

[22] Detailed information on metrics and assumptions for MXD+ Model provided by Kathrin Tellez (Fehr & Peers), February 4, 2016.
[23] Sherwin-Williams Development Project Draft Public Environmental Impact Report, Table IV.C-7.

TDM PROGRAM EFFECTIVENESS

The TDM plan includes a series of measures that will be incorporated into the project. As many of these measures are programmatic in nature, and complimentary to one another, it is critical to quantify vehicle trips that could be reduced with the implementation of the complete TDM program. As explained below, the methodology to actually quantify the effectiveness of the TDM program used the trip generation analysis from the EIR document and produced estimated, quantifiable trip reduction results by employing the URBEMIS model. Nelson\Nygaard has used URBEMIS to calculate the trip reduction effects of the location and various TDM programs. The URBEMIS mitigation component is a simple yet powerful tool; it employs standard traffic engineering methodologies, but provides the opportunity to adjust ITE average trip generation rates to quantify the impact of a development's location, physical characteristics and any demand management programs. In this way, it provides an opportunity to fairly evaluate developments that minimize their transportation impact through the implementation of TDM programs.

It is important to note that for purposes of this analysis, the input values in URBEMIS did not include the same metrics and assumptions that were incorporated into the MXD+ modeling, as previously discussed. This approach was to avoid any redundancies in the number of vehicle trip reductions that the MXD+ model accounts for (e.g. land use mix).

TDM measures are complimentary and support one another to achieve vehicle trip reductions. Because of this, the effectiveness of one TDM measure cannot be evaluated independent of the other measures included in the proposed TDM program. Assuming each of the proposed measures in this report are included in the Sherwin-Williams Development Project TDM program, an estimated 17% trip reduction can be expected. Figure 7 shows the overall trip reductions that can be expected based on the proposed TDM program.

Figure 7 Estimated Trip Generation with TDM program

Period	Estimated Vehicle Trips	Percent Trip Reduction based on TDM Program	Vehicle Trip Reduction based on TDM Program	Adjusted Daily Trips
Weekday Daily (including AM and PM peak hours below)	3,610	-17.01%	-614	2,996
Weekday AM Peak Hour	*279*	*-17.01%*	*-47*	*232*
Weekday PM Peak Hour	*323*	*-17.01%*	*-55*	*268*
Weekend Daily (including peak hour below)	3,220	-17.01%	-548	2,672
Weekend Peak Hour	*282*	*-17.01%*	*-50*	*232*

Source: Nelson\Nygaard, 2016.

2 cont.

Letter C15 Attach.

10 ANNUAL MONITORING

A robust monitoring program is key to the success of the project's TDM Program. Monitoring allows the City of Emeryville and Lennar Multifamily Communities to specifically determine trip reductions, as well as a more qualitative assessment of how the programs offered are meeting the needs of residents and employees.

The objectives of the annual monitoring program are:

- To measure progress towards achieving, or retaining, compliance with the Plan goals to reduce automobile trips; and
- To identify the most and least effective TDM strategies, so that the former can be strengthened and the later can be replaced or significantly improved.

Ongoing monitoring will enable City of Emeryville and Lennar Multifamily Communities to determine if the effectiveness of the program is growing over time or if adjustments are needed to improve the performance of the TDM program.

This chapter describes the approach, program components, and proposed process of the monitoring program. As described in the City of Emeryville Municipal Code, the TDM plan shall be implemented for a minimum of 40 years following issuance of a certificate of occupancy. The efficacy of the TDM plan shall be measured by conducting "annual survey of residents of the development to measure the plan's success at achieving its primary goal". The assigned TDM Coordinator and/or relevant personnel member shall submit the survey information to the City's Community Development Director, as required. Additionally, the City's Community Development Director may require modifications to the Plan if it does not appear to be meeting its primary goal. As such, Lennar Multifamily Communities or future property management will be responsible for annual reporting and assessment of the TDM plan.

MONITORING APPROACH AND PROCESS

The monitoring approach and process for the project includes the following:

1. Monitor
2. Analyze
3. Report
4. Refine
5. Implement

Monitoring Plan

Lennar Multifamily Communities or future property management will develop a data collection plan for traffic/bike/pedestrian counts, parking occupancy surveys, and an employee/resident survey. These materials will be updated each year, yet should facilitate consistent data collection and analysis across years.

Data should be collected over a one-week period during the fall or spring during a “typical week" - one in which there are no holidays or rainy weather. Data collection should be done during the same month each year. The following data will be collected:

- Annual traffic counts at all entry and exit points to the site during morning and evening peak-hour.

- Sampling counts to determine automobile occupancies and carpool rates
- Resident and employee travel and TDM surveys, via hard copy and web-based survey methods
- Bicycle and pedestrian counts along key facilities or at gateways
- Parking occupancy for public and private, on- and off-street facilities

The Transportation Representatives will work with the site-level TDM Coordinator to make sure the survey is distributed to all residents and employees, with a goal of a 60% response rate.

Data Analysis

Lennar Multifamily Communities or future property management will analyze the data collected to measure the following metrics:

- Analysis of peak hour traffic counts to compare with the peak-hour baseline trip generation for residential and non-residential land uses
- Employee and resident mode split
- Participation rates in TDM programs and services
- Parking utilization throughout the day at public/private on- and off-street facilities
- TDM program awareness
- Cost-effectiveness of the TDM program

In monitoring project-related vehicle trips, it is strongly recommended that the monitoring program evaluate the site's trips in the aggregate, and not try to differentiate trip type. From a practical perspective, trying to monitor "commercial" or "residential" trips will likely prove problematic. The surveys would provide a more appropriate method by which to determine mode split and travel behavior by user group or specific building/tenant.

In addition, the data collection and analysis process will enable the Lennar Multifamily Communities or future property management to gather more qualitative data, such as employee and resident feedback on what programs they are using, what is working well, and how programs can be improved.

The data can be analyzed and cross-referenced to derive information such as by what mode employees and residents of the project travel for various trip purposes; the frequency of travel by a mode other than the single-occupant-vehicle; or which TDM services employees and residents use and why (and vice versa). This data can be further cross-referenced with demographic data to classify travel characteristics by personal and household characteristics such as occupation, income, vehicle ownership, vehicle availability, place of residence, and household size. Cross-referencing is valuable in targeting specific groups with programs designed to meet their needs.

Annual Reporting

Following the data analysis the Lennar Multifamily Communities or future property management will prepare an annual TDM Progress Report that summarizes the transportation program over the preceding year, intended upcoming changes, and achievement towards the trip reduction targets. The reports should be submitted within a month of the completion of the data collection. This report will be submitted to the City of Emeryville Community Development Director and posted online for public review. Descriptions of elements that will be included in the Progress Report are listed below:

- Introduction identifying goals of the TDM plan
- Summary of past performance

2 cont.

Letter C15 Attach.

- Findings of the data analysis, including but not limited to:
  - Comparison of vehicle trips to trip reduction target
  - Mode split data by group
  - Parking occupancy rates
  - Bicycle and pedestrian counts
- Employee and resident survey results
- Any recommended or planned changes to the TDM program based on the performance of the programs over the past year or responses to the surveys

Refine and Implement

As needed, and based on the findings presented in the Annual Report, Lennar Multifamily Communities or future property management, in collaboration with the City, will develop an annual detailed refinement plan for the TDM plan to improve performance of the program so as to reasonably meet vehicle trip reductions. The refinement plan will included a detailed implementation program for program refinements, including required actions and timelines for property owners, businesses, tenants, and residential associations, as appropriate.

At this time, it is not possible or prudent to define exactly how the program can and should be revised if it does not reasonably comply with the trip reduction targets. Refinements to the TDM plan will need to be developed based on trip counts, survey data, and detailed information regarding travel behavior of residents employees, and visitors. Potential revisions to the TDM plan could include:

- Increased financial subsidies for transit, biking, walking, or ridesharing and/or direct financial payments to reduce single-occupancy vehicle trips;
- Improved and diversified parking management, including increasing parking fees;
- Enhanced marketing and promotion of TDM programs;
- Expanded bike sharing and car sharing services;
- Additional investment in transit, biking, and walking infrastructure;
- Increased on-site TDM staffing levels ;
- Administrative changes to ensure that programs are as user-friendly as possible to use; and/or
- Other measures determined to be appropriate by Lennar Multifamily Communities or future property management and the City.

2 cont.

Letter C15 *Attach.*

COMMENTER C15

Kevin Ma
March 8, 2016

Response C15-1: This comment is introductory in nature and notes that the commenter is providing a Draft Transportation Demand Management (TDM) program for consideration for the proposed project. The TDM is included as comment C15-2.

Response C15-2: The proposed TDM plan attached to this letter and prepared by the applicant includes general TDM measures, including:

- Site-Level Transportation Coordinator
- On-Site Bicycle Repair Facilities
- Transportation Representatives
- Pre-Tax Commuter Benefits
- On-Site Transportation Information
- Ridematching Services
- AC Transit EasyPass Program
- Unbundled Parking
- Car Sharing
- Maximum Parking Ratios
- Bike Sharing
- Parking Pricing
- On-Site Bicycle Repair Facilities
- On-Street Parking Time Limits

In addition to the operational measures, the TDM plan notes the infrastructure that is proposed within the development to better accommodate pedestrian and bicycle travel within and adjacent to the site.

A monitoring program is also proposed that would allow for adjustments to the TDM plan as conditions and the City should dictate over time.

The TDM plan provides a quantitative analysis to determine the extent to which the TDM programs would reduce the potential for vehicle trip generation to the project site. The method employed to estimate the vehicle trip reduction was applied to the net-new vehicle trip generation estimates from the Draft EIR that already considered the potential trips to/from the

project site to be made via non-auto modes, suggesting the application of an additional 17 percent reduction to the vehicle trip generation estimates.

The trip generation estimates used in the Draft EIR already considered the non-motorized infrastructure that would be constructed with the project, and also considered the applicable City requirements that would apply to this project, including the preparation of a TDM plan, maximum parking supply, unbundling of parking prices and establishment of a bike share pod within the project vicinity. While the monitoring program could have goals to achieve additional vehicle trip reductions beyond those presented in the Draft EIR, application of an additional reduction factor for the purposes of the Draft EIR analysis could understate the level of additional vehicle traffic that could be added to the roadway network in the project vicinity, and is not recommended as a more conservative analysis was taken and is appropriate for the project.

Letter C16

Canan Tolon
1420 45th Street
Studio #20
Emeryville CA 94608
(510) 658 5937

Miroo Desai, AICP
Senior Planner
City of Emeryville
1333 Park Avenue
Emeryville CA 94608March

March 8, 2016

I am writing to comment on the dEIR I painstakingly studied these last weeks.
I am a 16-year resident at the artists' CO-OP in Emeryville, concerned with the Sherwin William's massive project proposal to be built without a proper and in-depth study on the environmental impact neighboring residents and surroundings. I would also like to express my discontent and disappointment in the way the February 25th meeting was handled and how residents' comments were restricted to two-minute, from the usual three-minute duration. This, not only restricted the community's communication sharing, but it also stifled the concerns of residents for which this meeting was meant to voice. This did not look good and made me question the real reasons and the intentions behind such meetings. **1**

The Sherwin William project development is no doubts massive, and will be built on an extremely problematic site. Therefore such in-depth scrutiny should be expected. Despite the impressive looking dEIR, I was surprised to see how it failed to address all the points and concerns the neighboring community has brought to your attention during the past year. It gives the impression that very little have been heard, and been registered, displaying a certain lack of care to such important concerns. **2**

Nobody can deny that a massive development would have minimal impact. Yet the dEIR is doing precisely that: the dEIR fails to REALISTICALLY address the significance of the impact it would have on the neighborhood with very loud construction noise. It fails to consider the fact that 3 to 5 years, and more, is an unbearable long time for all live/work communities around neighboring the site. **3** It fails to address the significance in the real amount of poison and pollutants it will release in the air during the removal of contaminated soils. **4** It fails to address the fact that the quality of light will seriously affect those who depend on daylight to produce the work and make a living from these. It erroneously states that it is in compliance with building heights and density of the neighborhood, but plans to build 75 feet tall buildings at maximum density. **5**

I would like to see all these important issues be addressed, and not be pushed under the rug with the assumption that no one would read through the many pages of the dEIR.
In my earlier letter to the city, last year, I had cited all these concerns, however none were addressed; one being the placement of the so-called 46th street the project proposes, jamming the traffic problem even further. This, to me, is a blatant display of insufficient care to our concerns, and to the efforts we have put in our alternative design to the project proposal. **6**

I am in the point of my career where I have many projects lined-up, whose realizations totally depend on my living and working in the CO-OP. A long "undetermined" long period of construction would seriously hinder my activity as an artist, it would require my relocation, and a considerable loss of income for the length of the construction; I am sure I am not the only one concerned with this important problem.
I would also be fair that we are given long enough time (longer that a week) to review the EIR. **7**

I would appreciate your careful consideration of my letter.

Sincerely,
Canan Tolon.

COMMENTER C16

Canan Tolon
March 8, 2016

Response C16-1: The commenter believes that there was not a "proper and in-depth study on the environmental impact neighboring residents and surroundings." This comment does not contain any specifics regarding what topic(s) in the Draft EIR were not properly analyzed and what additional in-depth study needed to occur. In general the City as Lead Agency and EIR authors disagree with this statement and the Draft EIR contains in depth descriptions and analysis of environmental topics on over 500 pages and five appendices of text, tables and figures. The commenters concerns over the February 25, 2016 hearing are noted.

Response C16-2: The commenter claims that the Draft EIR does not address concerns raised by neighbors previously; however, the comment does not site specific deficiencies within the Draft EIR analysis, so no response can be provided.

The Draft EIR and the City's Noise Ordinance notes that construction activities are loud but are also temporary, and provide mitigation measures to reduce the noise impacts to the degree they can be to a less-than-significant level. Construction-related noise is evaluated on pages 265 through 267 of the Draft EIR. As noted within those pages, a construction-related noise impact was identified; implementation of Mitigation Measure NOI-3 would reduce the impact to a less-than-significant level.

On page 266, the Draft EIR notes that during the construction period, if multiple pieces of heavy construction equipment are operated simultaneously at the nearest site boundary to the closest residential building facades, noise levels could range up to 89 dBA Lmax. However, this analysis represented a worst case scenario as Building 31-1 is located along the project site's southeastern boundary and would provide some noise dampening and reduction for the existing residential uses and the location of site preparation activities and the use of the majority of heavy equipment (e.g., bulldozers).

Response C16-3: Construction-related air quality and health-risk impacts are evaluated within the Impacts and Mitigation Measures subsection of Section IV.D, Air Quality, which starts on page 203 of the Draft EIR. Per CEQA requirements, the construction impacts discussion evaluates impacts up to the property line 3of building façades and useable outdoor space of effected sensitive receptors. As shown in the analyses, with the implementation of standard mitigation measures, construction-related air quality impacts can be reduced to less-than-significant levels. In regards to the potential for the movement of contaminated soils to cause air quality impacts, compliance with DTSC requirements and the implementation of Mitigation Measures HAZ-2a, HAZ-

2b, HAZ-2c, and HAZ-2 would ensure that potential significant hazards associated with the disturbance of soil and groundwater at the project site would be less than significant. See also responses to comment letter A4 from the Department of Toxic Substances Control (DTSC).

Response C16-4: Please see Response C8-3.

Response C16-5: Please see Master Response 2 and Response B2-9 regarding compliance of the project with City policies and plans.

Response C16-6: The proposed Horton Street/46th Street intersection was evaluated within the Draft EIR. This intersection is identified as Intersection #14 in the Draft EIR. As described in Section IV.C, Transportation and Circulation, of the Draft EIR, while no specific impacts requiring mitigation are identified for this intersection, recommendations are presented to facilitate vehicle circulation, including the requirement that vehicles turning from 46th Street yield to traffic on Horton Street.

Please see Response B2-91 regarding the reasonable range of alternatives evaluated within the Draft EIR.

Response C16-7: Please see Response B2-6 regarding the construction schedule. Please note that the public review period for the Draft EIR was 60 days, not one week as suggested by the commenter.

Letter
C17

Sharon Wilchar
Arts Consultant

Miroo Desai, AICP
Senior Planner
City of Emeryville
1333 Park Avenue
Emeryville, CA 94608

March 8, 2016
Comments on DEIR for the Sherwin Williams Development Project

Dear Ms. Desai:

How to approach this tome? I started with summaries, moved on to areas of particular interest: traffic & circulation (density), construction, visual resources (height/streetscape) – all the while thinking about my day to day experience on Horton at 45th and moving about the city – having lived in a live/work building for 35 years at the 45th Street Artists' Cooperative. 1

With this in mind, I believe the baseline traffic count done in 2015 is flawed, underrepresented. Horton Street only runs from Mandela Parkway to 62nd Street and, in 2015, there were several anomalies in the use of at least four major structures just between 45th and Stanford. A Novartis building (G) and one Grifols building (CMF) between 53rd and Stanford on the east side of Horton were not occupied and were (and still are) undergoing construction renovation and upgrade. Another Grifols building (O) at Stanford between Horton and Peladeau had been vacated by Bayer administration, remains vacant, and is now on the market for lease. And the city of Emeryville Corporation yard at Horton and Stanford on the west side of the street was and is vacant / undergoing remediation. Any traffic to and from these buildings during the traffic count would not have captured the usual traffic from these sites. 2

These sites should be identified as to location, size and use and explain how traffic to and from these buildings are treated in the DEIR.

Page 71 diagram - #1 Blue Star Corner is not identified in figure IV. A-1. Please identify this additional live/work complex. 3

I found the Proposed Land Uses on pages 73 and 74 to be lacking. If you are going to go as far as the MAZ building at San Pablo and W. MacArthur or Nady Systems at Shellmound and Aquatic Park, what about the Transit Center and EmeryStation West right on Horton Street or the Pelco building at the foot of Park Avenue at Halleck purchased in 2015? The new Pelco owner has expressed an intent to enlarge the building and create both new residential and commercial uses. Additionally, a large vacant building at Hollis and Powell, now leased to Stanford Medical and undergoing tenant improvements for future occupancy, should be identified here. If you are including Ambassador Housing that is completed and occupied in this list, should you not include Parc on Powell with its retail portion unfilled? Other than land use, several of these will also come into play in the Near and Cumulative Traffic analysis. 4

Letter
C17
Cont.

This Cumulative should also include the Banker/Marks building, an entire city block on Horton, as the owners/reps have stated an intent (to the Park Avenue District Advisory Committee) to develop this site into mixed use with residential. Restoration Hardware submitted a proposal to the Planning Department (and RH representatives presented this plan to the Park Avenue District Advisory Committee) for a project including retail of some fashion. They have withdrawn that proposal but the site is still being actively marketed at Horton and 40th. These sites all need to be included in any analysis. **4 cont.**

Still on traffic and circulation, there is an analysis of traffic flow out of the proposed site but nothing analyzed in terms of traffic flow out of existing uses on Horton and Sherwin. The 45th St Artists' Coop has a secured surface parking lot exiting onto Horton almost directly across from the project proposed 46th Street. We have 56 studios and approximately 66 parking spaces. There are other driveways on Horton in the immediate area (Horton Lofts, Grifols, Peets), Blue Star corner garages on Sherwin and Halleck and the1500 Park Warehouse parking garage on Halleck. Will any of the Sherwin Williams driveways or new streets conflict with egress and turning points for these existing Horton, Sherwin and Halleck driveways. **5**
Please identify all of these driveways and evaluate any conflict or effect on existing driveways.

Lastly, traffic from another perspective. There is mention in the DEIR that construction workers might just park on the street (Mitigation Measures TRANS-9). Reality check. Over the last couple of years both residents and businesses in the immediate area have presented their concerns and frustration several times to the Park Avenue Advisory Committee and also the Public Works & Transportation Committee concerning lack of street parking surrounding the Sherwin Williams site and in the Park Avenue District. **6**

Traffic and an <u>accurate</u> analysis of traffic counts, circulation (45th, 53rd and 59th Streets and Stanford Avenue all dead end at Horton), air quality and noise generated by vehicles … it's a big issue. **7**

Sharon Wilchar

Sharon Wilchar
Resident and Community Liaison
45th Street Artists' Cooperative

1420-45th Street, suite 19, Emeryville, California 94608
tel: 510/652-6778 cell: 510/318-2455 fax: 510/652-4548 e-mail: swilchar1@aol.com

COMMENTER C17

Sharon Wilchar
March 8, 2016

Response C17-1: This comment is introductory in nature and provides a summary of the organization of the commenter's letter. Please see Responses C17-2 through C17-7 that address the comments raised by the commenter.

Response C17-2: Please see Response B2-43.

Response C17-3: In response to this comment, Figure IV.A-1 on page 71 of the Draft EIR is revised and is shown in Chapter IV. Text Changes to this document.

Response C17-4: The list of planned land uses described on pages 73 and 74 of the Draft EIR is not intended to be comprehensive of all proposed projects within the City, but is intended to provide a representative sample of proposed projects within the vicinity of the project site. Please see Response B2-32 for a discussion of projects included in the cumulative analysis. See also Response B2-33.

Response C17-5: Please see Responses B2-45 and C13-3.

Response C17-6: The Draft EIR acknowledges that construction workers may park on the street surrounding the project site. Mitigation Measure TRANS-9 requires the preparation of a construction management plan that identifies the parking areas for site employees, visitors and inspectors.

Response C17-7: Transportation, air quality, and noise impacts are evaluated within the Draft EIR. Section IV.C, Transportation and Circulation, beginning on page 85 of the Draft EIR, evaluates transportation impacts, including an analysis of the intersections of Horton Street and 45th Street, 53rd Street, and Stanford Avenue. The City and Fehr & Peers determined that the projects effects to the 59th Street /Horton intersection were minimal and it was not included in the project study area. Air quality impacts are evaluated in Section IV.D, Air Quality, beginning on page 187 of the Draft EIR, and vehicle noise is evaluated in Section IV.E, Noise, on pages 263 through 265 of the Draft EIR.

Letter
C18

From: M. Louise Stanley <lulu@locrian.com>
Sent: Tuesday, March 08, 2016 2:03 PM
To: Miroo Desai
Subject: Sherwin Williams Project

Miroo Desai, Senior Planner (Re: Draft EIR)
City of Emeryville
1333 Park Avenue
Emeryville, CA 94608

Dear Miroo Desai, (Hard copy delivered on this day) 8 March 2016

I am asking that the Emeryville Planning and Development committee be sensitive to the needs of the neighborhood concerning the building out of the Sherwin Williams project. 1

Traffic and exhaust:
I live on the corner of 45th and Horton Streets and for over 23 years I've had to contend with exhaust fumes coming into my windows whether open or not. Sherwin Williams had a loading dock directly across from my studio and the trucks would idle for over 45 minutes at a time spewing diesel into my windows. Drivers reluctantly turned off their motors when I knocked on their cab doors, often several times a day. Because Horton Street is narrow and the SW building is high, exhaust fumes hover and would be increased with more traffic and an added stop light. When the stop sign was installed the fumes became worse in my studio. **I have been diagnosed with Sarcoidosis a serious lung condition brought on by particulate and chemicals. My concerns are the added traffic, dust and pollution over a long period during the construction of the project and the trauma to my unreinforced brick building.** 2

Project construction - timeline:
The extended construction time (4+ years) puts undue stress on the neighborhood which is made up of 70% live-work residences. We artist's work around the clock. **My biggest fear** is the jiggling and vibration from foundation work as our Co-op is an unreinforced brick building already compromised by recent projects in the area (remediation work on the SW property and construction on Bay Street). 3

Entry to site and height:
Access to the site should be moved south on Horton Street to avoid the entrance into the Emeryville Artist's Coop parking lot. Presently on some days the traffic on Horton makes it difficult to exit our lot. Added traffic will glut this narrow street whose curb parking makes visibility difficult. With a minimum of traffic in an 18hr day period over 1,000 cars coming and going is unacceptable for any neighborhood. 4

The shadow study for height was not done from the prospective of the 45th Street co-op across the street. 5

Thank you for your consideration, Louise Stanley

M. Louise
1420 45th Street #29
Emeryville, Ca 94608
lulu@locrian.com
www.mlouisestanley.com

COMMENTER C18
Louise Stanely
March 8, 2016

Response C18-1: This comment is a request to the City of Emeryville Planning Commission and does not address the analysis or information within the Draft EIR; no further response is required.

Response C18-2: Air Quality impacts were identified and addressed in Draft EIR Section IV.D, Air Quality. Signalization of intersections on Horton Street is not proposed as part of the project, nor has it been identified as a mitigation measure. See also B3-19 regarding truck idling.

Response C18-3: Potential effects associated with construction concerning noise, groundbourne vibration, air quality and greenhouse gas emissions were address in the Draft EIR in Section IV.F, Noise, Section IV.D, Air Quality, and IV.E, Greenhouse Gas Emissions, respectively

Response C18-4: Please see Response C13-3.

Response C18-5: Please see Response C8-3.

Letter
C19

From: hengrich@gmail.com on behalf of Richard Heng <rheng88@gmail.com>
Sent: Tuesday, March 08, 2016 2:48 PM
To: Miroo Desai
Subject: Sherwin Williams EIR

Hello Miroo,

My name is Richard Heng and I recently had my offer accepted for a townhouse on Halleck, which is adjacent to the Sherwin Williams development.

I just wanted to add my comments that I would definitely prefer option B which would put the city park next to our homes and reduce construction noise. I also would really love full court basketball courts for the sports courts. 1

Has the decision for these items been made yet? Is there anything I can do to influence these decisions at this point?

Anyway, I'm really excited to be joining the Emeryville community. Thanks for reading!

Sincerely,
Richard

COMMENTER C19
Richard Heng
March 8, 2016

Response C19-1: This comment relates to the project design and does not relate to the adequacy of the information or analysis within the Draft EIR. Comments that focus solely on the merits of the proposed project will be considered by City decision-makers as they review these materials, and no further response is required under CEQA.

Letter C20

From: Tim Curran <2timcurran@gmail.com>
Sent: Tuesday, March 08, 2016 2:02 PM
To: Miroo Desai; Miroo Desai
Subject: Sherwin Williams DEIR Comments
Attachments: Sherwin Williams Alternative Plan.jpg

Miroo Desai,

I submitted an alternative plan for the Sherwin Williams' development (attached) for inclusion in the DEIR.

The alternative was the only alternative that included an extension of Halleck St. for automotive traffic onto the proposed development.

The extension of Halleck St. has the potential of lessening the impact of the development's traffic on the Horton St. Bicycle Blvd. and the 45th St. Bicycle Blvd. by directing more traffic onto Park St. **1**

Please explain why my alternative was not included in the DEIR and explain which requirement(s) as described in Chapter VI were not met.

Please indicate who made the decision not to include my alternative in the DEIR.

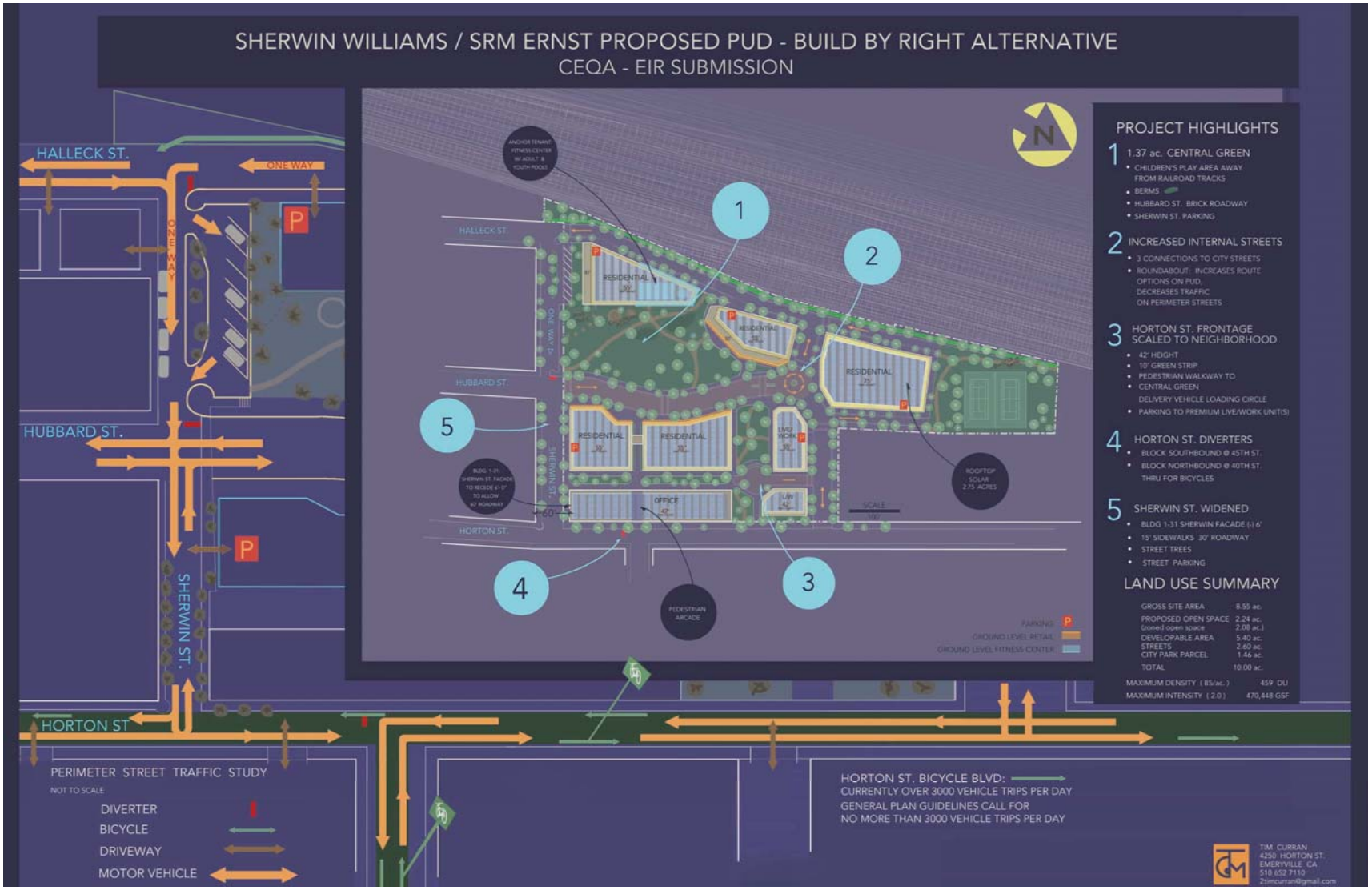
Also, please explain why the section of Horton St. between 45th and Sherwin St. was not included in the Horton Street Turn Restriction Assessment, Appendix B, Tables 1,2 and 3 and Appendix E, Tables A-1, A-2, and A-3.

Changes in traffic volumes of this section of Horton St. will effect my residence at 4250 Horton St. with noise and pollution impacts. Changes in this section of Horton St. will also effect the level of safety I will experience entering and exiting my street parked vehicle on this narrow section of roadway. Inclusion of this section of Horton St. will assist in my decisions regarding the future viability of a residence in this location. **2**

Please include the section of Horton St. between 45th St. and Sherwin St. in the traffic analysis.

Thank you,

Tim Curran
4250 Horton St. #13
Emeryville, CA 94608



Letter C20 *Cont.*

COMMENTER C20

Tim Curran
March 8, 2016

Response C20-1: CEQA Guidelines Section 15126.6 states that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Furthermore, as noted in CEQA Guidelines Section 15126.6(a) "An EIR need not consider every conceivable alternative to a project."

The Draft EIR currently includes a range of alternative to the proposed project, as summarized in Table VI-1 on page 474 of the Draft EIR. This alternative includes an alternative circulation pattern, which includes the extension of Halleck Street into the project site, as well as a reduction in overall development on the project site. While the alternatives evaluated within the Draft EIR do not exactly match the specifications presented by the commenter, alternatives that included a reduction in the level of the development on the project site were evaluated, and the alternatives represent a range of reasonable alternatives to the project.

Response C20-2: Existing traffic volumes on the segment of Horton Street between 45th Street and Sherwin Avenue is similar to the level of traffic on the adjacent segments, approximately 3,500 vehicles per day. Installation of traffic diverters on Horton Street at 40th Street for northbound movements and on Horton Street at 53rd Street for southbound movements is expected to divert approximately 2,000 vehicle trips per day from the segment of Horton Street between 45th Street and Sherwin Avenue, similar to adjacent segments of Horton Street.

Response C20-3: This comment provides a depiction of the "alternative plan" submitted by the commenter. No further response is necessary.

D. PUBLIC HEARING COMMENTS

PUBLIC HEARING D

February 25, 2016 6:30 p.m.
Sherwin-Williams Development Project Public Hearing
City of Emeryville

D1 Rudolph Brooks

D1-1: The commenter is concerned about contaminants in the water, soil, and air and wants City to require testing of soil and water and ensure that measures are put in place to protect workers on the site and future residents.

Response D1-1: See Response C13-5.

D1-2: The commenter heard that the study of the project site is incomplete and requests further details regarding how the City park will be constructed to ensure it is safe.

Response D1-2: Please see Responses B2-2 and B2-7 for a discussion of information required to be included in the Project Description of the Draft EIR. See also Response C13-5 and responses to the DTSC Letter A4.

D5 Francis Rodriquez

D5-1: The commenter introduced herself as a sheet metal worker and expressed concerns about unsafe working conditions for construction workers due to potential hazards on the project site.

Response D5-1: See Response C13-5 and responses to the DTSC Letter A4.

D2-2: As an Emeryville resident, commenter questions whether the park site is clear of hazards. The commenter requests that a further hazardous materials study be conducted to determine the presence of benzene and soil vapors.

Response D2-2: See Response C13-5 and responses to the DTSC Letter A4.

D3 Jason Gumataotao

D3-1 Commenter introduced himself as part of electrical workers 595 and expressed concerns about details not included in the EIR related to items the developers may not be addressing.

Response D3-1: This comment is not specific about the details that the commenter believes are missing, and no further response is required.

D3-2: The commenter inquired as to what Lennar is doing to improve the streets.

Response D3-2: This comment does not raise concerns regarding the environmental analysis or information contained within the Draft EIR. Section IV.C, Transportation and Circulation in the Draft EIR evaluates project-related traffic impacts and identifies mitigation measures to address those impacts.

D4 Angela Martin

D4-1: The commenter introduced herself as part of electrical workers 595 and expressed concerns about details not included in the EIR related to hazardous materials on the site.

Response D4-1: See Response D3-1.

D4-2: The commenter expressed concerns about unsafe working conditions due to potential hazards on the project site.

Response D4-2: See Response C13-5 and responses to the DTSC Letter A4.

D5 Richard Grassetti

D5-1: Commenter introduced himself as a consultant representing the 45th Street Artists' Cooperative, stating that some issues raised in the comment letter he submitted on the NOP were not adequately addressed.

Response D5-1: All NOP letters are included in Appendix A of the Draft EIR. The comment does not include specific issues that weren't addressed from the NOP letter. Please see Response B2-1 for a discussion of the Draft EIR's use of the CEQA Guidelines.

D5-2: The commenter believes the project is infeasible as it could not meet the City's bonus requirements, which also affects the alternatives that would also become infeasible.

Response D5-2: Please see Master Response 2 for a discussion of the Development Bonus and project feasibility.

D5-3: The commenter feels that the EIR is generic in its discussions, is not detailed enough, and lacks sufficient evidence.

Response D5-3: The comment includes reference to the EIR as "generic in discussions, not detailed enough." The commenter does not identify specific deficiencies, or provided additional information or analysis. See also responses to Mr. Grassetti's comment letter B2.

D5-4: The commenter believes that the Project Description is inadequate and needs to include the number of bedrooms to prepare sufficient Traffic/Air/Noise analysis as the foundation of the design and traffic analysis.

Response D5-4: Please see Responses B2-2 and B2-7 for a discussion of information required within the Project Description of the Draft EIR.

D5-5: The commenter remarked that the mitigations for construction activities and noise and dust control for the Coop residents appear to be in noncompliance.

Response D5-4: Please see Responses B2-60 through B2-71.

D6 Sharon Wilchar

D6-1: The commenter expressed concerns that the 2015 baseline traffic counts for Horton Street are flawed because new buildings have been built since the study was conducted, and counts are generally under-represented, as follows:

- Existing land uses on page. 71 of the Draft EIR does not identify Blue Star Corner
- The proposed transit center Emeryville station west is not identified.

Response D6-1: See Responses C17-1 through C17-7. Figure IV.A-1 will be revised to include Blue Star Corner, see Chapter IV. Text Revisions in this RTC document. The proposed transit center was not included as it is not an existing land use.

D6-2**:** The commenter believes that traffic flow in/out of proposed site was analyzed but not the effects on the surrounding uses including the addition new project driveways on Horton Street, and their effect on exiting driveways. The commenter believes that the project would conflict with existing driveways.

Response D6-2: See Response C17-5.

D7 Kristin Peterson

D7-1: The commenter lives in the 45th Street Artists' Cooperative. Live/Work lofts have no air filtration and rely on windows for ventilation. The commenter expressed concerns that the Air Quality and Noise analysis did not take the open windows into consideration.

Response D7-1: Please see Response B2-41 and Responses B2-60 through B2-71 and Responses C11-1 through C11-8 for a discussion of construction dust impacts on surrounding residents, including the 45th Street Artists' Cooperative. Air Quality impacts are evaluated within the Impacts and Mitigation Measures subsection of Section IV.D, Air Quality, which starts on page 203 of the Draft EIR. As shown in the analyses, with the implementation of standard mitigation measures, air quality impacts can be reduced to less-than-significant levels. Noise impacts are evaluated within the Impacts and Mitigation Measures subsection of Section IV.F, Noise, which starts on page 259 of the Draft EIR. As shown in the analyses, with the implementation of standard mitigation measures, noise impacts can be reduced to less-than-significant levels.

D7-2: The commenter stated that data is missing from Appendix C, which shows only 15 months for construction of the project, but it will take 34 months to complete the project.

Response D7-2: See Response C11-5.

D7-3: The commenter stated that the project is relying on the City's outdated bonus structure and needs to start over.

Response D7-3: Please see Master Response 2 for a discussion of the Development Bonus and project feasibility.

D8 Gary Grimm

D8-1: The commenter lives in the 45th Street Artists' Cooperative; he stated that windows are open constantly and he expressed concerns about with ventilation.

Response D8-1: Please see Response B2-41 and Responses C5-1 through C5-20 for a discussion of construction dust impacts on surrounding residents, including the 45th Street Artists' Cooperative.

D8-2: The commenter states that "the EIR is incomplete and lacks factual support for impacts."

Response D8-2: The commenter does not identify specific deficiencies, or provided additional information or analysis.

D8-3: The commenter expressed concerns about the increase of noise from stationary sources and loading and unloading locations, and Noise Impacts 2 and 3 related to construction noise.

Response D8-3: Please see Response C5-11 which includes a discussion of stationary noise impacts and Mitigation Measure NOI-2. The noise impacts associated with construction would be considered less than significant with adherence to the City's Noise Ordinance standards, which would be required with implementation of Mitigation Measure NOI-3. Both the City's Noise Ordinance and General Plan do not include a maximum noise level threshold for construction noise levels.

D9 John Demerrit

D9-1: The commenter lives in the 45th Street Artists' Cooperative and expressed concerns with quality of life issues related to construction and operations with the project. The Coop building relies on windows for ventilation system and light, 24 hours a day and the project could affect the quality of life of residents.

Response D9-1: Please see Responses B2-41, B2-46 and B2-60 through B2-71 and B5-1 regarding "quality of life issues."

D9-2: The commenter expressed concerned with noise impacts that would occur from 7:00 a.m. to 6:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on weekends. 70 percent of the Coop is live/work, and the commenter requests additional data on noise impacts.

Response D9-2: Please see Responses B2-67 through B2-71. Construction related noise impacts are discussed in Section IV.F, Noise. Construction noise impacts to the 45th Street building are discussed on page 266 of the Draft EIR. The City noise ordinance is described on page 259 of the Draft EIR. The Ordinance defines daytime hours as the period from 7:00 a.m. to 9:00 p.m. on weekdays and from 8:00 to 9:00 p.m. The ordinance does not make assumptions as to whether occupants of receiving land uses would be home during the day or not or whether land uses would be residential or office spaces. Nighttime noise limits are typically more restrictive to protect relaxation and sleeping hours. Page 267 of the Draft EIR identifies Mitigation Measure NOI-3, which would require the project contractor to implement measures to reduce construction noise impacts to a less than significant level. The analysis concluded that impacts would be reduced to a less than significant level, and therefore retrofitting of the 45th Street building would not be required.

D10 Nora Pauwels

D10-1: The commenter lives in the 45th Street Artists' Cooperative and expressed concerns with the visual simulations, and referenced the Draft EIR where it is stated that no shadows will affect the coop. The commenter remarks that the loss of light will affect artists' work, specifically, the cumulative effects at 45th Street and Horton, and additionally on scenic vistas.

Response D10-1: Please see Responses B2-85 through B2-89 for a discussion on visual resources analyses under CEQA. Please see Response C8-3 regarding shadow impact analysis.

D11 Paul Germain

D11-1: The commenter lives in the 45th Street Artists' Cooperative and expressed concerns with the visual analysis related to the Park Avenue Resident Committee (PARC).

Response D11-1: See Response D10-1.

D11-2: The commenter remarked that the Environmentally Superior alternative is the Coop alternative.

Response D11-2: Please see Response B2-96 for a discussion on alternatives and the environmentally superior alternative.

D11-3: The commenter remarked that the proposed project cannot be built because the rules changed to only allow bonus points with the addition of affordable housing. The commenter asserts that the proposed land use does not address new rules and the project is not feasible.

Response D11-3: Please see Master Response 2 for a discussion of the Development Bonus and project feasibility.

D11-4: The commenter remarked that the EIR is flawed.

Response D11-4: The comment states "the EIR is flawed" but does not identify specific deficiencies, or provided additional information or analysis.

D12 Kevin Kellogg

D12-1: The commenter lives in the 45th Street Artists' Cooperative and is involved in PARC, remarking that Horton Lofts was a good project and important to the region. The commenter expressed concerns that the Draft EIR for the proposed project is significantly lacking in hazardous materials study.

Response D12-1: See Response C13-5 and responses to the DTSC Letter A4.

D12-2: The commenter expressed concerns that the traffic study for the proposed project is incomplete, failing to analyze certain street segments and provide details of mitigation measures.

Response D12-2: See Responses B2-47 through B2-59.

D12-3: The commenter expressed concerns that visual impacts at Horton Street and Sherwin Avenue would affect cultural buildings.

Response D12-3: Impacts on Visual Resources are discussed in the Draft EIR on page 393 to 395. Impacts on historic buildings within a State scenic highway are analyzed and no impact would result from the proposed project. Section IV.J, Cultural Resources evaluates potential effects on cultural resources including historical resources resulting from the project and provides Mitigation Measures CULT-1 to reduce those impacts to a less-than-significant level.

D13 Judy Timmel

D13-1: The commenter identified herself as being associated with Residents United, requesting that the Draft EIR not be approved due to nonconformance to the 2009 General Plan, zoning, Park Avenue Plan or Family friendly design guidelines.

Response D13-1: Please see Master Response 2 regarding policy consistency.

D13-2: The commenter expressed concerns that Horton Street would be maintained as a bicycle boulevard, but that the increased traffic would eliminate three bicycle boulevards.

Response D13-2: Please see Response B1-11.

D13-3: The commenter questions the finding that the project would have no cultural impacts.

Response D13-3: The commenter does not identify specific deficiencies in the cultural analysis, or provide additional information or analysis.

D13-4: The commenter remarked that the project does not contain any affordable or family friendly housing and is not good for Emeryville.

Response D13-4: These comments do not raise concerns regarding the environmental analysis or information contained within the Draft EIR; no response is required.

D14 Bryan Hord

D14-1: The commenter noted that Blue Star Corner is missing from Figure IV.A-1.

Response D14-1: Figure IV.A-1 will be revised to include Blue Star Corner, see Chapter IV. Text Revisions in this RTC Document.

D14-2: The commenter expressed that the proposed project that is analyzed in the Draft EIR is old and the changes that the community proposed are good.

Response D14-2: This comment does not raise concerns regarding the environmental analysis or information contained within the Draft EIR.

D15 Kate Rutter

D15-1: The commenter noted that Blue Star Corner is missing from Figure IV.A-1.

Response D15-1: Please see Response D14-1.

D15-2: The commenter expressed concerns with the process and timeline, and remarked that a Response to Comments document is not adequate.

Response D15-2: This comment does not raise concerns regarding the environmental analysis or information contained within the Draft EIR.

D16 Archana Horsing

D16-1: The commenter lives in the 45th Street Artists' Cooperative and expressed concerns with shadows, as the Coop needs real light to do work.

Response D16-1: The impacts of shade and shadows that would result from implementation of the proposed project are evaluated within the Impacts and Mitigation Measures subsection of Section IV.M, Visual Resources, which starts on page 427 of the Draft EIR. Please see Response C8-3 regarding shadow impacts on the 45th Street Artists' Cooperative.

D16-2: The commenter requested information about where "noisy equipment" will be located.

Response D16-2: Please see Response B4-52.

D16-3: The commenter expressed concerns about air quality.

Response D16-3: Please see Response B2-60 through B2-63.

D16-4: The commenter expressed concerns about that the lack of affordable housing included in the proposed project.

Response D16-4: This comment does not raise concerns regarding the environmental analysis or information contained within the Draft EIR.

D17 Louise Stanley

D17-1: The commenter lives at 45th/Horton and expressed concerns about poor air quality associated with loading docks.

Response D17-1: Please see Responses to Comment letter C18 and Response C5-11 for a discussion of loading areas and Impact NOI-2.

D18 Mike McConnell

D18-1: The commenter lives in the 45th Street Artists' Cooperative and remarked that analysis of the project needs an unbiased approach. The commenter stated that the proposed projects buildings are too tall for the area.

Response D18-1: Please see Letter C10. This comment does not raise concerns regarding the environmental analysis or information contained within the Draft EIR.

D19 Edythe Bresnahan

D19-1: The commenter lives in the 45th Street Artists' Cooperative and her studio windows face the street. With other construction projects, the commenter could not be in her studio for several weeks because of construction-related noise, dust, and fumes. The commenter contends that Horton Street should not be used for transporting materials or deliveries to the project site.

Response D19-1: Please see Response B2-41 and B2-46 for a discussion of construction dust impacts on surrounding residents, including the 45th Street Artists' Cooperative.

D19-2: The commenter reiterated that these are live/work residences, and therefore, residents are in their units day and night. The commenter expressed the need for good oversight due to time/duration of construction.

Response D19-2: Please see Responses B2-46 and B2-60 through B2-71 regarding construction effects on sensitive receptors. These comments do not raise concerns regarding the environmental analysis or information contained within the Draft EIR.

D20 Tim Curran

D20-1: The commenter stated that he submitted an alternative that was not analyzed in the Draft EIR, and noted that a Lennar alternative was analyzed in the Draft EIR.

Response D20-1: See responses to Letter C20. CEQA Guidelines Section 15126.6 states that "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most [emphasis added] of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Furthermore, as noted in CEQA Guidelines Section 15126.6(a) "An EIR need not consider every conceivable alternative to a project." The alternatives included in the Draft EIR meet these requirements.

This page intentionally left blank.

IV. DRAFT EIR TEXT REVISIONS

The sixth bullet point on page 8 of the Draft EIR is revised as follows:

- The Hollis Street/45th Street intersection (#16) is projected to operate at LOS F during the weekday PM peak hour in the Near-Term and Cumulative Condition and peak hour signal warrants would be satisfied. The addition of project traffic would exacerbate this deficiency, resulting in a significant impact in the Cumulative Condition. The addition of diverted traffic from Mitigation Measure TRANS-1a would also increase vehicle delay and queue spillback at the on Hollis Street/45th Street intersection (#16), and the changed area travel patterns would increase conflicts for bicyclists and pedestrians on the 45th Street bicycle boulevard (analysis segments E, F, and G).

Impacts and Mitigation Measures TRANS-1, TRANS-4, and TRANS-7 in Table II-1 on pages 10, 12 and 14 of the Draft EIR are revised as shown on the following page.

Mitigation Measure TRANS-9 on pages 15 and 173 of the Draft EIR has been revised to include additional measures not required by the City's Standard COAs, as follows:

Mitigation Measures TRANS-9: Although construction impacts are expected to be temporary, development of a construction management plan would reduce the potential for construction vehicle conflicts with other roadway users. The plan should include:

- Project staging plan to maximize on-site storage of materials and equipment;
- A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak hours; lane closure schedule and process; signs, cones, and other warning devices for drivers; and designation of construction access routes;
- Permitted construction hours;
- Location of construction staging;
- Identification of parking areas for construction employees, site visitors, and inspectors, including on-site locations and along the project frontage on Sherwin Avenue and Horton Street;
- Provisions for street sweeping to remove construction related debris on public streets; and
- Provisions for pavement maintenance where increased heavy vehicle traffic has the potential to degrade the pavement. ~~(LTS)~~
- Truck deliveries to the project shall occur not earlier than 7:00 a.m and not later than 4:00 p.m.
- If lane closures are required on Sherwin Avenue and/or Horton Street, the applicant shall notify property owners within 300 feet of the project site ten days in advance of the lane closures. (LTS)

Table II-1: Summary of Impacts and Mitigation Measures from the EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
…			
C. TRANSPORTATION AND CIRCULATION			
TRANS-1a: The addition of project traffic to Horton Street north of 53rd Street (analysis segment A), a designated bicycle boulevard, could increase traffic volumes by more than 2 percent contributing to an exceedance of the volume threshold for a bicycle boulevard. This impact would occur with either Option A or Option B and is considered a significant impact.	S	TRANS-1a: The project applicant shall undertake the following measures to reduce the level of traffic on Horton Street north of 53rd Street (analysis segment A): • Pay the Transportation Impact Fee; • Work with the City so that the final project design does not preclude the installation of desired traffic calming measures along the Horton Street corridor, as identified by the City; and • Pay for the installation of permanent Level 4 traffic calming measures and traffic restriction (diversion) measures on Horton Street (Level 5) per the Sherwin Williams - Horton Street Turn Restriction Assessment Memorandum (see Appendix B) that would result in the reduction of existing with project daily volumes to a level below 3,000 vehicles per day.	LTS
…			
TRANS-4a: The addition of project traffic to Horton Street north of 53rd Street (analysis segment A), a designated bicycle boulevard, under Near-Term and Cumulative Conditions could increase traffic volumes by more than 2 percent on a roadway where volumes already exceed the volume threshold for a bicycle boulevard. This impact would occur with either Option A or Option B and is considered a significant impact.	S	TRANS-4a: Implement Mitigation Measure TRANS-1a to reduce the level of traffic on Horton Street north of 53rd Street (analysis segment A). Implementation of this measure would reduce the impact to Horton Street north of 53rd Street to a less-than-significant level in the Near-Term Condition. In the Cumulative Condition, the impact to Horton Street north of 53rd Street would remain significant and unavoidable.	LTS in the Near-Term Condition; SU in the Cumulative Condition
…			
TRANS-7: The Hollis Street/45th Street intersection (#16) is projected to operate at LOS F during the weekday PM peak hour in the Near-Term and Cumulative Conditions and peak hour signal warrants would be satisfied. The addition of project traffic would exacerbate this deficiency, resulting in a significant impact in the Near-Term and Cumulative Condition. The addition of diverted traffic from Mitigation Measure TRANS-1a would also increase vehicle delay and queue spillback at the on Hollis Street/45th Street intersection (#16), and the changed area travel patterns would increase conflicts for bicyclists and pedestrians on the 45th Street bicycle boulevard (analysis segments E, F, and G).	S	TRANS-7: The project applicant shall install a traffic signal at the Hollis Street/45th Street intersection (#16), including hard-wired signal interconnect to the traffic signal at Park Avenue and Hollis Street, and necessary improvements for transit, bicycle and pedestrian infrastructure at the intersection, including directional curb ramps, bicycle detection, and transit priority (included as part of Mitigation Measures TRANS-1d and TRANS-2). Installation of a traffic signal would reduce this impact to a less-than-significant level and with incorporation of pedestrian, bicycle and transit improvements, would not result in secondary impacts to other travel modes.	LTS

Mitigation Measure AIR-1 on pages 17 and 211 of the Draft EIR is revised as follows:

Mitigation Measure AIR-1: Consistent with guidance from the BAAQMD, the following actions shall be required in relevant construction contracts and specifications for the project:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Construction equipment idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- The project applicant shall post a publicly visible sign with the telephone number and person to contact at the City of Emeryville regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.
- All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or a moisture probe.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- Vegetative ground cover (e.g., fast-germinating native grass seed) or other plants that offer dust mitigation measures shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. To the extent feasible, activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than 1 percent.
- The project contractor shall use low volatile organic compound (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).

- All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NO_x and PM.
- All contractors shall use equipment that meets California ARB's most recent certification standard (as of 2016, the certification date is July 26, 2007) for off-road heavy duty diesel engines.

Mitigation Measure AIR-2a on pages 18 and 219 of the Draft EIR is revised as follows:

> Mitigation Measure AIR-2a: To reduce health risk levels for future residents of the project site, the project applicant shall provide an air ventilation system with filtration that can remove particulate matter from indoor air to a level sufficient to achieve compliance with the BAAQMD threshold. To reduce health risk levels for future residents of the project site, the control efficiency must result in a reduction of 60 percent of particulates of 2.5 microns or less, such as Minimum Efficiency Reporting Value (MERV)-11 filters or other indoor air filtration systems. This reduction could be accomplished via a duct routed from the return side of the ceiling mounted fan coil to the exterior of the building. A MERV-11 filter box could be installed in line with this duct along with a supply fan to overcome the pressure drop of this filter. The filter box would be installed in a concealed location such as a closet. This measure ~~which~~ would reduce the maximum single source carcinogenic health risk level for future residents to 8.4 (which would be below the BAAQMD's significance criteria of 10). The ventilation system shall be certified to the satisfaction of the City to achieve the stated performance effectiveness from indoor areas.

Mitigation Measure GEO-1 on pages 21 and 278 of the Draft EIR is appended as follows:

> (e) All foundation designs and geotechnical remedies shall consider existing hazardous materials remediation systems and ensure that these remediation systems are not adversely affected. Any geotechnical remedies that could result in alteration of the direction or flow velocity of groundwater shall be approved by the DTSC prior to implementation.

Mitigation Measure HYD-1b on pages 25 and 291 of the Draft EIR is appended as follows:

> 5. All stormwater treatment landscaping shall be maintained using a Bay-Friendly Landscaping company or staff.
>
> 6. All stormwater treatment measures shall consider existing hazardous materials remediation systems and ensure that these remediation systems are not adversely affected.
>
> 7. Any stormwater treatment measures that could result in alteration of the direction or flow velocity of groundwater shall be approved by the DTSC prior to implementation. (LTS)

Mitigation Measure HAZ-2a on pages 27 and 316 of the Draft EIR is revised as follows:

> Mitigation Measure HAZ-2a: As a condition of approval for construction permits for the Sherwin-Williams parcel, an evaluation of soil gas conditions and indoor air quality shall be performed on the Sherwin-Williams parcel and Department of Toxic Substances Control (DTSC) review and approval for construction shall be obtained. If the evaluation of soil gas conditions indicates that vapor intrusion to indoor air could pose a significant health risk for future occupants (e.g., if vapor intrusion could result in an excess cancer risk of greater than one in a million or an appropriate health risk threshold determined by DTSC), DTSC may

require further investigation and/or implementation of engineering controls (e.g., installation of sub-slab vapor barriers and ventilation systems) to address the potential for vapor intrusion to indoor air. If engineering controls are required by DTSC to mitigate vapor intrusion risks, operations, maintenance, and monitoring of the engineering controls would be required by DTSC to ensure their effectiveness and demonstrate that performance standards are being achieved (e.g., monitoring of sub-slab concentrations of VOCs to demonstrate that the sub-slab ventilation system is functioning properly and that concentrations of VOCs are not accumulating beneath buildings that could exceed the level of protection offered by sub-slab vapor barriers). If the performance standards for the engineering controls are not achieved, additional engineering controls would be required by DTSC (e.g., converting a passive sub-slab ventilation system to an active sub-slab ventilation system, or maintaining positive pressure within buildings using the heating, ventilation, and air conditioning [HVAC] systems). The City shall ensure that the requirements specified by DTSC~~, such recommendations shall be~~ are implemented prior to occupancy of the proposed structures.

Mitigation Measure HAZ-2b on pages 27 and 316 of the Draft EIR is revised as follows:

Mitigation Measure HAZ-2b: As a condition of approval for construction permits for residential housing on the Successor Agency parcel (under development Option A), an evaluation of soil gas conditions and indoor air quality shall be performed on the Successor Agency parcel and DTSC review and approval for construction shall be obtained. If the evaluation of soil gas conditions indicates that vapor intrusion to indoor air could pose a significant health risk for future occupants (e.g., if vapor intrusion could result in an excess cancer risk of greater than one in a million or an appropriate health risk threshold determined by DTSC), DTSC may require further investigation and/or implementation of engineering controls (e.g., installation of sub-slab vapor barriers and ventilation systems) to address the potential for vapor intrusion to indoor air. If engineering controls are required by DTSC to mitigate vapor intrusion risks, operations and maintenance and monitoring of the engineering controls would be required by DTSC to ensure their effectiveness and demonstrate that performance standards are being achieved (e.g., monitoring of sub-slab concentrations of VOCs to demonstrate that the sub-slab ventilation system is functioning properly and that concentrations of VOCs are not accumulating beneath buildings at concentrations that could exceed the level of protection offered by sub-slab vapor barriers). If the performance standards for the engineering controls are not achieved, additional engineering controls would be required by DTSC (e.g., converting a passive sub-slab ventilation system to an active sub-slab ventilation system, or maintaining positive pressure within buildings using the HVAC systems). The City shall ensure that the requirements specified by DTSC~~, such recommendations shall be~~ are implemented prior to occupancy of the proposed structures.

The Draft EIR is revised to include Mitigation Measure HAZ-2d in Table II-1 on page 28 and on page 319, as modified below:

Mitigation Measure HAZ-2d: As a condition of approval for construction permits for the Successor Agency parcel and the Sherwin-Williams parcel, a SMP shall be prepared which provides guidelines for soil and groundwater disturbing activities to be performed on the Successor Agency parcel and the Sherwin-Williams parcel. The SMP shall include, but not be limited to, the following elements:

- Dust and vapor controls;
- Storm water controls;
- Excavated soil stockpile management;
- Soil stockpile sampling procedures;
- Soil and/or groundwater transportation and disposal procedures;
- Groundwater dewatering, treatment, and/or discharge;
- Notification and response procedures if previously unidentified subsurface features of environmental concern (e.g., buried tanks, drums, hazardous materials pipelines, or hazardous building materials) are discovered;
- Notification and response procedures if previously unidentified areas of potential soil or groundwater contamination (e.g., soil or groundwater exhibiting discoloration and/or odors, or soil containing rubble or other debris) are discovered;
- Notification and response procedures if previously installed remedial features are inadvertently damaged;
- Importing of clean fill materials; and
- Health and safety requirements.

The SMP shall be reviewed and approved by ~~DSTC~~DTSC prior to conducting soil or groundwater disturbing activities at the project site. The SMP shall be revised if previously unidentified environmental hazard~~ous~~s are discovered which require additional measures to be incorporated into the SMP to ensure protection of construction workers, the surrounding public, and the environment, such as changes in health and safety requirements (e.g., worker training or personal protective equipment [PPE] requirements), material handling/sampling protocol, or air monitoring requirements. Any revisions to the SMP shall be reviewed and approved by DSTC prior to conducting soil or groundwater disturbing activities that would be affected by the revisions to the SMP. (LTS)

The last paragraph of Section 2.d on page 40 of the Draft EIR is revised as follows:

The Successor Agency parcel was remediated in 2008 ~~under oversight of~~ in accordance with the DTSC and Water Board approved SCP ~~and the property has not been restricted for development of any land use~~. Following the completion of remedial excavation activities, soil impacted with contaminants concentrations exceeding cleanup goals remained on the Successor Agency parcel due to the physical constraints preventing further excavation.

Table III-4 on page 64 of the Draft EIR is revised to include additional DTSC approvals, as follows:

Table III-1: Required Permits and Approvals

Lead Agency	Permit/Approval
City of Emeryville	• General Plan Amendment • Planned Unit Development and Preliminary Development Plan • Final Development Plan(s) • Encroachment Permits • Tentative Map and Final Map • Acceptance of Public Easements/Dedications • Grading Permit • Building Permit • Stormwater Permit for C.3. LID Measures • Private Sewer Lateral Permit • Any ancillary contracts or agreements between the City (or its agencies) and the developer, including for a land swap, development agreement, etc.
Other Agencies	
Department of Toxic Substances Control	• Approval of Construction Plans • Soil Management Plan • Groundwater Management Plan • Any future soil vapor investigations • Plans for removal of the transformer and the former underground storage tank which was abandoned in place at the Sherwin-Williams Parcel.
East Bay Municipal Utilities District (EBMUD)	• Water Supply Assessment • Approval of reclaimed and potable water services
Alameda County Flood Control District	• Approval of new storm drain connection to Temescal Creek

Source: LSA Associates, 2015.

Page 67 of the Draft EIR is revised to include the following text for clarification:

E. CUMULATIVE ANALYSIS CONTEXT

CEQA defines cumulative as "two or more individual effects which, when considered together, are considerable, or which can compound to increase other environmental impacts." Section 15130 of the CEQA Guidelines requires that an EIR evaluate potential environmental impacts when the project's incremental effect is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. These impacts can result from a combination of the proposed project together with other projects causing related impacts.

When evaluating cumulative impacts, CEQA allows the use of either a list of past, present, or reasonable anticipated relevant projects, including projects outside the control of the lead agency, or a summary of the projections in an adopted planning document, such as a General Plan, or some thoughtful combination of the two. Depending the environmental topic, either a

list of reasonably anticipated projects and or the projections of the General Plan were used to evaluate the potential cumulative impact.

For the cumulative traffic analysis, a Near-Term Conditions are defined as conditions around the time the project is expected to be completed and occupied. The Near-Term Conditions projects included in the analysis is based on the City of Emeryville Community Development Department Status of Major Development Projects dated April 2015. The projects included in the Near-Term Cumulative conditions include:

- Marketplace: 549 units.
- Hyatt Hotel: 171 rooms.
- 6701 Shellmound: Redevelopment of former industrial site for approximately 211 rental housing units.
- 3900 Adeline: Construction of a 101-unit rental apartment project on a 1.12 acre site that is partially in Oakland.
- 3706 San Pablo: Redevelopment of former Golden Gate Lock & Key site for City-sponsored affordable housing project with approximately 87 units and 6,130 square feet of commercial space.
- 3800 San Pablo: Renovation of former "Maz" building for 17,158 square feet of retail use, and 1,048 square feet of live-work; and construction of a new 75 foot, 5-story, 105- unit residential structure on the east portion of the lot over two levels of parking. Eastern 25 percent of lot is in Oakland.
- Emeryville Station West: Mixed use transit-oriented development and public parking structure with about 250,000 square feet of office/lab/retail space, 4 Amtrak bus bays, and 148 parking spaces in a 165-foot tall tower on the "Mound" site; and a 675-space, 7 level parking garage with 3,620 square feet of ground floor commercial space on the Heritage Square site. Project includes new public plaza between Amtrak Station and new tower building.
- Parc on Powell: Construction of a new rental project with 168 residential units, 5 live-work units, 3 flex space units, 10,222 square feet of retail space, and 299 parking spaces. Project includes new park along Stanford Avenue to replace City parking lot.
- Pixar Warehouse: Storage space for Pixar archives and reference material in 28,637 square feet of vacant portion of Level (3) building.
- Emeryville Center of Community Life: Multi-purpose community facility including administration; arts, performance, and food service programs; community services and family support programs; education programs; and recreation and fitness programs.

Due to the uncertainty of the level and expected time of completion for the Novartis development, adjacent to the project site, a longer-term Cumulative Conditions assessment was also conducted for the traffic analysis that included Novartis. The traffic model outputs were used to assess the potential cumulative air quality, global climate change, and noise impacts.

Figure IV.A-1 on page 71 of the Draft EIR is revised to include Blue Star Corner, as shown on the following page.

LSA

FIGURE IV.A-1-Revised

N

Project Site

0 200 400
FEET

Sherwin-Williams Project EIR
Existing Land Uses

SOURCE: GOOGLE EARTH 06/14; LSA ASSOCIATES, INC., 2015.

I:\CEM1404 sherwin-williams\figures\Fig_IVA1_Revised.ai (5/2/16)

This page intentionally left blank.

Page 74 of the Draft EIR has been revised as follows:

- **Novartis Campus.** The Novartis ~~This~~ project could include~~s~~ approximately 788,000 square feet of net-new laboratory/research and development space to the north of the project site. The Novartis ~~This~~ project was approved in ~~2005~~ 1995 however; the timing and/or feasibility of completion of construction have not yet been determined.

Page 83 of the Draft EIR has been revised as follows:

c. Cumulative Impacts. The proposed project would add a total of 540 new housing units to the existing housing stock in Emeryville and increase population by approximately 923 residents. The General Plan 2030 identifies the addition of 3,812 new housing units by 2030. Since 2008 (the baseline year for the General Plan), the City has issued permits for 809 housing units, approximately 21 percent of identified new housing units.[7] With permitted housing units considered, there are approximately 3,003 remaining housing units anticipated with buildout of the 2030 General Plan. Additionally, if the units included in the Cumulative Projects List are approved, this would result in a total of 390 units (already approved units on the Cumulative Project's list are already included in the issued permit total of 809 units). In total the approved units (809), potentially approved units (390), and units associated with the proposed project (540) would total 1,739 units. This represents approximately 46 percent of the units anticipated by the General Plan by 2030. The proposed project would represent approximately 18 percent of the anticipated units to be built by 2030.

Page 174 of the Draft EIR has been revised as follows:

Traffic Forecasts. Fehr & Peers used the Alameda Countywide Travel Demand Model to forecast 2020 ~~2025~~ and 2040 traffic volumes on the MTS roadway system. The forecasts for the MTS system differ from the intersection forecasts previously discussed in the following aspects:

- The regional model does not include some minor streets in Emeryville, potentially overstating traffic volumes on the roadways included in the model.
- The MTS roadway analysis reports the outputs of the Alameda CTC model directly on a roadway segment level.

The results of the Alameda CTC model were used to forecast the No Project Conditions for 2020 ~~2025~~ and 2040. To identify potential impacts associated with the project, project trips were distributed to the MTS roadway segments (including freeways and surface streets) identified above using the project trip distribution described above. The distribution of project trips onto the MTS segments results in the project volumes for 2020 ~~2025~~ and 2040 shown in Tables IV.C-22 and IV.C-23.

Analysis Method. Operations of the MTS freeway and surface street segments were assessed based on volume-to-capacity (V/C) ratios. For freeway segments, a per-lane capacity of 2,000 vehicles per hour was used. For surface streets, a per-lane capacity of 800 vehicles per hour was used. These capacities do not reflect additional capacity provided at intersections through turn pockets. Roadway segments with a V/C ratio greater than 1.0 are assigned LOS F.

Analysis Results. The MTS PM peak hour roadway segment analyses are provided in Table IV.C-22 for the 2020 ~~2025~~ condition and Table IV.C-23 for the 2040 condition. Results of the analysis indicate that the proposed project would not result in or worsen deficient operations on the MTS roadway segments included in this assessment. Therefore, the impact to the MTS roadway system is less-than-significant.

The title of Table IV.C-25 on page 175 of the Draft EIR is revised as follows:

Table IV.C-25: 2020 ~~2025~~ PM Peak Hour CMP Roadway Segment Analysis

Table IV.D-5 and Table IV.D-6 on pages 209 and 212 of the Draft EIR are modified as follows:

Table IV.D-5: Project Construction Emissions in Pounds Per Day

Project Construction	ROG	NO_x	Exhaust $PM_{2.5}$	Total $PM_{2.5}$	Exhaust PM_{10}	Total PM_{10}
Average Daily Emissions	~~32.0~~34.4	18.2	0.8	1.6	0.9	3.3
Average Daily Emissions from Park Construction, Roadway Construction and Soil Import	3.5	6.5	0.36	0.42	0.38	0.56
Total Construction Emissions	37.9	24.7	1.16	2.02	1.28	3.86
BAAQMD Thresholds	54.0	54.0	54.0	NA	82.0	NA
Exceed Threshold?	No	No	No	NA	No	NA

NA = Not Applicable, the BAAQMD does not have threshold

Source: LSA Associates, Inc., ~~2015~~2016.

Table IV.D-6: Project Regional Emissions

Emission Category	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO_x)	PM_{10}	$PM_{2.5}$
Emissions in Pounds Per Day				
Area Source Emissions	~~27.7~~ 29.7	0.5	0.8	0.8
Energy Source	0.2	1.9	0.1	0.1
Mobile Source Emissions	10.5	21.3	0.3	0.3
Total Emissions	**~~38.4~~ 40.1**	**23.7**	**1.3**	**1.2**
BAAQMD Significance Threshold	**54.0**	**54.0**	**82.0**	**54.0**
Exceed?	**No**	**No**	**No**	**No**
Emissions in Tons Per Year				
Area Source Emissions	~~4.8~~ 5.2	0.1	0.02	0.02
Energy Source	0.0	0.3	0.03	0.03
Mobile Source Emissions	1.6	3.4	2.68	0.75
Total Emissions	**~~6.4~~ 6.8**	**3.8**	**2.73**	**0.80**
BAAQMD Significance Threshold	**10.0**	**10.0**	**15.0**	**10.0**
Exceed?	**No**	**No**	**No**	**No**

Source: LSA Associates, Inc., ~~2015~~2016.

The fourth paragraph on page 287 of the Draft EIR has been revised as follows:

On-going groundwater monitoring has been performed at the Sherwin-Williams parcel since 2012 as part of post-remediation activities.[29] The purpose of groundwater monitoring is to gather groundwater data to evaluate the effectiveness of remediation and to determine whether contingency actions are needed to achieve cleanup goals.[30] Groundwater monitoring is

performed in accordance with an Operations and Maintenance Plan approved by Department of Toxic Substances Control (DTSC).[31] Groundwater monitoring involves collection of groundwater samples for chemical analysis and water level measurements of monitoring wells and piezometers located on- and off-site. During the October 2014 groundwater monitoring event, depth to groundwater measurements were collected from 14 monitoring wells and two piezometers located on the project site. Groundwater elevations at the project site during the October 2014 groundwater monitoring event ranged from 5.68 feet at the north parcel boundary near Temescal Creek and 10.06 feet North American Vertical Datum of 198832 near the southeast corner of the parcel near Building 1-31. Based on groundwater elevations, the groundwater flow direction in the northern portion of the site at the time of monitoring was toward the northwest toward Temescal Creek. ~~This groundwater flow direction is consistent with the topography of the project site.~~ In the southern portion of the property the groundwater flows to the southwest.

Page 364 of the Draft EIR is revised to include the following revision as the third paragraph:

The project applicant shall continue to coordinate with the City and EBMUD as they implement the various components of the proposed project regarding providing recycled water for appropriate non-potable uses. In addition, the project applicant will be responsible for the extension of recycled water pipelines to the proposed development and within the development.

Page 449 of the Draft EIR is revised as follows:

h. Housing Element. Programs applicable to the proposed project from the November 2014 Housing Element include H-2-1-1, H-2-1-2, H-7-2-1, H-7-2-5 and H-7-3-1. ~~The proposed project would not include affordable housing on the project site. However, the~~ The proposed project would seek a development bonus for both project development options in exchange for public benefits. The procedure for obtaining bonus points is outlined in Section 9.4.204 of the Emeryville Planning Regulations. The Planning Regulations allow developers to choose between the bonus system under Section 9.4.204 or that allowed under the State Density Bonus System, provided that the project requires no more than a 35 percent density bonus. Under the Planning Regulations the project requires a 100 percent density bonus, and therefore must use the bonus system under Section 9.4.204. The City encourages new housing development within the City's Priority Development Area (PDA) in keeping with regional greenhouse reduction strategies. The proposed project is envisioned by the City as a potential infill redevelopment site within the City's PDA. The proposed project would also comply with the City's Stormwater Ordinance and include features that would help prevent stormwater intrusion.

Table V-2 on page 469 of the Draft EIR is revised as shown on the following page.

Table V-2: Applicable General Plan Goals, Policies, and Programs

Goal, Policy, or Program Number	Goal, Policy, or Program Text	Project's Relationship to Goal, Policy, or Program
Housing Element Programs		
Program H-2-1-1	Continue to offer a density bonus for developments that include affordable units, and consider offering additional regulatory incentives such as free or reduced-cost pre-application meetings, study sessions, and/or expedited application review and permit processing.	The project applicant would seek a development bonus for the proposed project in exchange for providing public benefits. The public benefits offered include: • Retention and Adaptive Reuse of Building 1-31 • Pursuit of LEED ND Certification (Silver) • Transportation Demand Management: ▪ Bicycle sharing: ▪ Bike lockers: ▪ Electronic transit information signs • Electric vehicle charging stations (5 percent of nonresidential parking) • Family Friendly Housing (5 percent of units to be 3 bedroom units): ~~However, the proposed project would not include affordable housing.~~
Program H-2-1-2	Continue to implement the Affordable Housing Program (formerly known as the Affordable Housing Set-Aside Ordinance) to require the inclusion of below-market-rate units in residential projects.	The proposed project ~~would not~~may provide affordable housing on the project site.

APPENDIX A

Air Quality Data

Bay Area Air Quality Management District

Air Quality CEQA Thresholds of Significance

1. INTRODUCTION

Bay Area Air Quality Management District (BAAQMD or Air District) staff analyzed various options for California Environmental Quality Act (CEQA) air quality thresholds of significance for use within BAAQMD's jurisdiction. The analysis and evaluation undertaken by Air District staff is documented in the *Revised Draft Options and Justification Report – California Environmental Quality Act Thresholds of Significance* (Draft Options Report) (BAAQMD October 2009).

Air District staff hosted public workshops in February, April, September and October 2009, and April 2010 at several locations around the Bay Area. Air District staff also hosted additional workshops in each of the nine Bay Area counties specifically designed for, and to solicit input from, local agency staff. In addition, Air District staff met with regional stakeholder groups to discuss and receive input on the threshold options being evaluated. Throughout the course of the public workshops and stakeholder meetings Air District staff received many comments on the various options under consideration. Based on comments received and additional staff analysis, the threshold options and staff-recommended thresholds were further refined. The culmination of this nearly year and a half-long effort was presented in the Proposed Thresholds of Significance Report published on November 2, 2009 as the Air District staff's proposed air quality thresholds of significance.

The Air District Board of Directors (Board) held public hearings on November 18 and December 2, 2009 and January 6, 2010, to receive comments on staff's Proposed Thresholds of Significance (November 2, 2009; revised December 7, 2009). After public testimony and Board deliberations, the Board requested staff to present additional options for risk and hazard thresholds for Board consideration. This Report includes risks and hazards threshold options, as requested by the Board, in addition to staff's previously recommended thresholds of significance. The thresholds presented herein, adopted by the Air District Board of Directors, are intended to replace all of the Air District's currently recommended thresholds. The air quality thresholds of significance, and Board-requested risk and hazard threshold options, are provided in Table 1 at the end of this introduction.

1.1. BAAQMD/CEQA REGULATORY AUTHORITY

The BAAQMD has direct and indirect regulatory authority over sources of air pollution in the San Francisco Bay Area Air Basin (SFBAAB). CEQA requires that public agencies consider the potential adverse environmental impacts of any project that a public agency proposes to carry out, fund or approve. CEQA requires that a lead agency prepare an Environmental Impact Report (EIR) whenever it can be fairly argued (the "fair argument" standard), based on substantial evidence,[3] that a project may have a significant effect[4] on the environment, even if there is

[3] "Substantial evidence" includes facts, reasonable assumptions predicated upon facts, or expert opinions supported by facts, but does not include argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate

substantial evidence to the contrary (CEQA Guidelines §15064). CEQA requires that the lead agency review not only a project's direct effects on the environment, but also the cumulative impacts of a project and other projects causing related impacts. When the incremental effect of a project is cumulatively considerable, the lead agency must discuss the cumulative impacts in an EIR. (CEQA Guidelines §15064).

The "fair argument" standard refers to whether a fair argument can be made that a project may have a significant effect on the environment (*No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84). The fair argument standard is generally considered a low threshold requirement for preparation of an EIR. The legal standards reflect a preference for requiring preparation of an EIR and for "resolving doubts in favor of environmental review." *Meija v. City of Los Angeles* (2005) 130 Cal. App. 4th 322, 332. "The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data." (CEQA Guidelines §15064(b).

In determining whether a project may have a significant effect on the environment, CEQA Guidelines Section 15064.7 provides that lead agencies may adopt and/or apply "thresholds of significance." A threshold of significance is "an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant" (CEQA Guidelines §15064.7).

While thresholds of significance give rise to a presumption of insignificance, thresholds are not conclusive, and do not excuse a public agency of the duty to consider evidence that a significant effect may occur under the fair argument standard. *Meija*, 130 Cal. App. 4th at 342. "A public agency cannot apply a threshold of significance or regulatory standard 'in a way that forecloses the consideration of any other substantial evidence showing there may be a significant effect.'" *Id.* This means that if a public agency is presented with factual information or other substantial evidence establishing a fair argument that a project may have a significant effect on the environment, the agency must prepare an EIR to study those impacts even if the project's impacts fall below the applicable threshold of significance.

Thresholds of significance must be supported by substantial evidence. This Report provides the substantial evidence in support of the thresholds of significance developed by the BAAQMD. If adopted by the BAAQMD Board of Directors, the Air District will recommend that lead agencies within the nine counties of the BAAQMD's jurisdiction use the thresholds of significance in this Report when considering the air quality impacts of projects under their consideration.

1.2. JUSTIFICATION FOR UPDATING CEQA THRESHOLDS

Any analysis of environmental impacts under CEQA includes an assessment of the nature and extent of each impact expected to result from the project to determine whether the impact will be treated as significant or less than significant. CEQA gives lead agencies discretion whether to classify a particular environmental impact as significant. Ultimately, formulation of a standard of significance requires the lead agency to make a policy judgment about where the line should be drawn distinguishing adverse impacts it considers significant from those that are not deemed significant. This judgment must, however, be based on scientific information and other factual data to the extent possible (CEQA Guidelines §15064(b)).

or erroneous, or evidence of social or economic impacts that do not contribute to, or are not caused by, physical impacts on the environment. Cal. Pub. Res. C. §21080(c); *see also* CEQA Guidelines §15384.

[4] A "significant effect" on the environment is defined as a "substantial, or potentially substantial, adverse change in the environment." Cal. Pub. Res. C. §21068; *see also* CEQA Guidelines §15382.

In the sense that advances in science provide new or refined factual data, combined with advances in technology and the gradual improvement or degradation of an environmental resource, the point where an environmental effect is considered significant is fluid over time. Other factors influencing this fluidity include new or revised regulations and standards, and emerging, new areas of concern.

In the ten years since BAAQMD last reviewed its recommended CEQA thresholds of significance for air quality, there have been tremendous changes that affect the quality and management of the air resources in the Bay Area. Traditional criteria air pollutant ambient air quality standards, at both the state and federal levels, have become increasingly more stringent. A new criteria air pollutant standard for fine particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) has been added to federal and state ambient air quality standards. We have found, through technical advances in impact assessment, that toxic air contaminants are not only worse than previously thought from a health perspective, but that certain communities experience high levels of toxic air contaminants, giving rise to new regulations and programs to reduce the significantly elevated levels of ambient toxic air contaminant concentrations in the Bay Area.

In response to the elevated levels of toxic air contaminants in some Bay Area communities, the Air District created the Community Air Risk Evaluation (CARE) Program. Phase 1 of the BAAQMD's CARE program compiled and analyzed a regional emissions inventory of toxic air contaminants (TACs), including emissions from stationary sources, area sources, and on-road and off-road mobile sources. Phase 2 of the CARE Program conducted regional computer modeling of selected TAC species, species which collectively posed the greatest risk to Bay Area residents. In both Phases 1 and 2, demographic data were combined with estimates of TAC emissions or concentrations to identify communities that are disproportionally impacted from high concentrations of TACs. Bay Area Public Health Officers, in discussions with Air District staff and in comments to the Air District's Advisory Council (February 11, 2009, Advisory Council Meeting on Air Quality and Public Health), have recommended that $PM_{2.5}$, in addition to TACs, be considered in assessments of community-scale impacts of air pollution.

Another significant issue that affects the quality of life for Bay Area residents is the growing concern with global climate change. In just the past few years, estimates of the global atmospheric temperature and greenhouse gas concentration limits needed to stabilize climate change have been adjusted downward and the impacts of greenhouse gas emissions considered more dire. Previous scientific assessments assumed that limiting global temperature rise to 2-3°C above pre-industrial levels would stabilize greenhouse gas concentrations in the range of 450-550 parts per million (ppm) of carbon dioxide-equivalent (CO_2e). Now the science indicates that a temperature rise of 2°C would not prevent dangerous interference with the climate system. Recent scientific assessments suggest that global temperature rise should be kept below 2°C by stabilizing greenhouse gas concentrations below 350 ppm CO_2e, a significant reduction from the current level of 385 ppm CO_2e.

For the reasons stated above, and to further the goals of other District programs such as encouraging transit-oriented and infill development, BAAQMD has undertaken an effort to review all of its currently-recommended CEQA thresholds, revise them as appropriate, and develop new thresholds where appropriate. The overall goal of this effort is to develop CEQA significance criteria that ensure new development implements appropriate and feasible emission reduction measures to mitigate significant air quality impacts. The Air District's recommended CEQA significance thresholds have been vetted through a public review process and will be presented to the BAAQMD Board of Directors for adoption.

Table 1 – Air Quality CEQA Thresholds of Significance			
Pollutant	**Construction-Related**	**Operational-Related**	
Project-Level			
Criteria Air Pollutants and Precursors (Regional)	**Average Daily Emissions (lb/day)**	**Average Daily Emissions (lb/day)**	**Maximum Annual Emissions (tpy)**
ROG	54	54	10
NO_X	54	54	10
PM_{10}	82 (exhaust only)	82	15
$PM_{2.5}$	54 (exhaust only)	54	10
$PM_{10}/PM_{2.5}$ (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
GHGs **Projects other than Stationary Sources**	None	Compliance with Qualified Greenhouse Gas Reduction Strategy OR 1,100 MT of CO_2e/yr OR 4.6 MT CO_2e/SP/yr (residents + employees)	
GHGs **Stationary Sources**	None	10,000 MT/yr	
Risks and Hazards – New Source (All Areas) (Individual Project) **<u>Staff Proposal</u>**	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 µg/m^3 annual average <u>Zone of Influence</u>: 1,000-foot radius from fence line of source or receptor	

Table 1 – Air Quality CEQA Thresholds of Significance		
Pollutant	**Construction-Related**	**Operational-Related**
Risks and Hazards – New Receptor (All Areas) (Individual Project) **Staff Proposal**	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 µg/m^3 annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor
Risks and Hazards (Individual Project) **Tiered Thresholds Option**	Same as Operational Thresholds*	**Impacted Communities:** Siting a New Source Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >5.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.2 µg/m^3 annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor
Risks and Hazards (Individual Project) **Tiered Thresholds Option** (Continued)	Same as Operational Thresholds*	**Impacted Communities:** Siting a New Receptor **All Other Areas:** Siting a New Source or Receptor Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 µg/m^3 annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor

Table 1 – Air Quality CEQA Thresholds of Significance		
Pollutant	**Construction-Related**	**Operational-Related**
Risks and Hazards – New Source (All Areas) (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) $PM_{2.5}$: > 0.8 µg/m^3 annual average (from all local sources) Zone of Influence: 1,000-foot radius from fence line of source or receptor
Risks and Hazards – New Receptor (All Areas) (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) $PM_{2.5}$: > 0.8 µg/m^3 annual average (from all local sources) Zone of Influence: 1,000-foot radius from fence line of source or receptor
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant
Odors	None	Complaint History—Five confirmed complaints per year averaged over three years
Plan-Level		
Criteria Air Pollutants and Precursors	None	1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase

Table 1 – Air Quality CEQA Thresholds of Significance		
Pollutant	**Construction-Related**	**Operational-Related**
GHGs	None	Compliance with Qualified Greenhouse Gas Reduction Strategy (or similar criteria included in a General Plan) OR 6.6 MT CO2e/ SP/yr (residents + employees)
Risks and Hazards	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways
Odors	None	Identify the location of existing and planned sources of odors
Accidental Release of Acutely Hazardous Air Pollutants	None	None
Regional Plans (Transportation and Air Quality Plans)		
GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants	None	No net increase in emissions

Notes: CO = carbon monoxide; CO_2e = carbon dioxide equivalent; GHGs = greenhouse gases; lb/day = pounds per day; MT = metric tons; NO_X = oxides of nitrogen; $PM_{2.5}$= fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SO_2 = sulfur dioxide; SP = service population; TACs = toxic air contaminants; TBP = toxic best practices; tons/day = tons per day; tpy = tons per year; yr= year.

* Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

2. GREENHOUSE GAS THRESHOLDS

BAAQMD does not currently have an adopted threshold of significance for GHG emissions. BAAQMD currently recommends that lead agencies quantify GHG emissions resulting from new development and apply all feasible mitigation measures to lessen the potentially significant adverse impacts. One of the primary objectives in updating the current CEQA Guidelines is to identify a GHG significance threshold, analytical methodologies, and mitigation measures to ensure new land use development meets its fair share of the emission reductions needed to address the cumulative environmental impact from GHG emissions. GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. As reviewed herein, climate change impacts include an increase in extreme heat days, higher ambient concentrations of air pollutants, sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental

impacts. No single land use project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contribute substantially to the phenomenon of global climate change and its associated environmental impacts.

2.1. THRESHOLDS OF SIGNIFICANCE

Project Type	Thresholds
Projects other than Stationary Sources	Compliance with Qualified Greenhouse Gas Reduction Strategy OR 1,100 MT of CO_2e/yr OR 4.6 MT CO_2e/SP/yr (residents + employees)
Stationary Sources	10,000 MT of CO_2e/yr
Plans	Compliance with Qualified Greenhouse Gas Reduction Strategy (or similar criteria included in a General Plan) OR 6.6 MT CO_2e/SP/yr (residents + employees)
Regional Plans (Transportation and Air Quality Plans)	No net increase in GHG emissions

2.2. JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

BAAQMD's approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant. If mitigation can be applied to lessen the emissions such that the project meets its share of emission reductions needed to address the cumulative impact, the project would normally be considered less than significant.

As explained in the District's *Revised Draft Options and Justifications Report* (BAAQMD 2009), there are several types of thresholds that may be supported by substantial evidence and be consistent with existing California legislation and policy to reduce statewide GHG emissions. In determining which thresholds to recommend, Staff studied numerous options, relying on reasonable, environmentally conservative assumptions on growth in the land use sector, predicted emissions reductions from statewide regulatory measures and resulting emissions inventories, and the efficacies of GHG mitigation measures. The thresholds recommended herein were chosen based on the substantial evidence that such thresholds represent quantitative and/or qualitative levels of GHG emissions, compliance with which means that the environmental impact of the GHG emissions will normally not be cumulatively considerable under CEQA. Compliance with such thresholds will be part of the solution to the cumulative GHG emissions problem, rather than hinder the state's ability to meet its goals of reduced statewide GHG emissions. Staff notes that it does not believe there is only one threshold for GHG emissions that can be supported by substantial evidence.

GHG CEQA significance thresholds recommended herein are intended to serve as interim levels during the implementation of the AB 32 Scoping Plan and SB 375, which will occur over time. Until AB 32 has been fully implemented in terms of adopted regulations, incentives, and programs and until SB 375 required plans have been fully adopted, or the California Air Resources Board (ARB) adopts a recommended threshold, the BAAQMD recommends that local agencies in the Bay Area apply the GHG thresholds recommended herein.

If left unchecked, GHG emissions from new land use development in California will result in a cumulatively considerable amount of GHG emissions and a substantial conflict with the State's ability to meet the goals within AB 32. Thus, BAAQMD proposes to adopt interim GHG thresholds for CEQA analysis, which can be used by lead agencies within the Bay Area. This would help lead agencies navigate this dynamic regulatory and technological environment where the field of analysis has remained wide open and inconsistent. BAAQMD's framework for developing a GHG threshold for land development projects that is based on policy and substantial evidence follows.

2.2.1. Scientific and Regulatory Justification

Climate Science Overview

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, chlorofluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is *extremely unlikely* that global climate change of the past 50 years can be explained without the contribution from human activities (IPCC 2007a).

According to Article 2 of the United Nations Framework Convention on Climate Change (UNFCCC), "Avoiding Dangerous Climate Change" means: *"stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."* Dangerous climate change defined in the UNFCCC is based on several key indicators including the potential for severe degradation of coral reef systems, disintegration of the West Antarctic Ice Sheet, and shut down of the large-scale, salinity- and thermally-driven circulation of the oceans. (UNFCCC 2009). The global atmospheric concentration of carbon dioxide has increased from a pre-industrial value of about 280 ppm to 379 ppm in 2005 (IPCC 2007a). "Avoiding dangerous climate change" is generally understood to be achieved by stabilizing global average temperatures between 2 and 2.4°C above pre-industrial levels. In order to limit temperature increases to this level, ambient global CO_2 concentrations must stabilize between 350 and 400 ppm (IPCC 2007b).

Executive Order S-3-05

Executive Order S-3-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill 32, the California Global Warming Solutions Act of 2006, which set the 2020 greenhouse gas emissions reduction goal into law. AB 32 finds and declares that "Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020, and establishes

regulatory, reporting, voluntary, and market mechanisms to achieve quantifiable reductions in GHG emissions to meet the statewide goal.

In December of 2008, ARB adopted its *Climate Change Scoping Plan* (*Scoping Plan*), which is the State's plan to achieve GHG reductions in California, as required by AB 32 (ARB 2008). The Scoping Plan contains strategies California will implement to achieve a reduction of 169 MMT CO_2e emissions, or approximately 28 percent from the state's projected 2020 emission level of 596 MMT of CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT of CO_2e, or almost 10 percent, from 2002-2004 average emissions), so that the state can return to 1990 emission levels, as required by AB 32.

While the Scoping Plan establishes the policy intent to control numerous GHG sources through regulatory, incentive, and market means, given the early phase of implementation and the level of control that local CEQA lead agencies have over numerous GHG sources, CEQA is an important and supporting tool in achieving GHG reductions overall in compliance with AB 32. In this spirit, BAAQMD is considering the adoption of thresholds of significance for GHG emissions for stationary source and land use development projects.

Senate Bill 375

Senate Bill (SB) 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), which will prescribe land use allocation in that MPO's Regional Transportation Plan (RTP). ARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years, but can be updated every four years if advancements in emission technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for State funding programmed after January 1, 2012. New provisions of CEQA incentivize qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

The revised District CEQA Guidelines includes methodology consistent with the recently updated State CEQA Guidelines, which provides that certain residential and mixed use projects, and transit priority projects consistent with an applicable SCS or APS need not analyze GHG impacts from cars and light duty trucks (CEQA Guidelines §15183.5(c)).

2.2.2. Project-Level GHG Thresholds

Staff recommends setting GHG significance thresholds based on AB 32 GHG emission reduction goals while taking into consideration emission reduction strategies outlined in ARB's Scoping Plan. Staff proposes two quantitative thresholds for land use projects: a bright line threshold based on a "gap" analysis and an efficiency threshold based on emission levels required to be met in order to achieve AB 32 goals.

Staff also proposes one qualitative threshold for land use projects: if a project complies with a Qualified Greenhouse Gas Reduction Strategy (as defined in Section 2.3.4 below) that addresses the project it would be considered less than significant. As explained in detail in Section 2.3.4 below, compliance with a Qualified Greenhouse Gas Reduction Strategy (or similar adopted policies, ordinances and programs), would provide the evidentiary basis for making CEQA findings that development consistent with the plan would result in feasible, measureable, and verifiable GHG reductions consistent with broad state goals such that projects approved under

qualified Greenhouse Gas Reduction Strategies or equivalent demonstrations would achieve their fair share of GHG emission reductions.

Land Use Projects "Gap-Based" Threshold

Staff took eight steps in developing this threshold approach, which are summarized here and detailed in the sections that follow. It should be noted that the "gap-based approach" used for threshold development is a conservative approach that focuses on a limited set of state mandates that appear to have the greatest potential to reduce land use development-related GHG emissions at the time of this writing. It is also important to note that over time, as the effectiveness of the State's implementation of AB 32 (and SB 375) progresses, BAAQMD will need to reconsider the extent of GHG reductions needed over and above those from the implementation thereof for the discretionary approval of land use development projects. Although there is an inherent amount of uncertainty in the estimated capture rates (i.e., frequency at which project-generated emissions would exceed a threshold and would be subject to mitigation under CEQA) and the aggregate emission reductions used in the gap analysis, they are based on BAAQMD's expertise, the best available data, and use conservative assumptions for the amount of emission reductions from legislation in derivation of the gap (e.g., only adopted legislation was relied upon). This approach is intended to attribute an appropriate share of GHG emission reductions necessary to reach AB 32 goals to new land use development projects in BAAQMD's jurisdiction that are evaluated pursuant to CEQA.

Step 1 Estimate from ARB's statewide GHG emissions inventory the growth in emissions between 1990 and 2020 attributable to "land use-driven" sectors of the emission inventory as defined by OPR's guidance document (*CEQA and Climate Change*). Land use-driven emission sectors include Transportation (On-Road Passenger Vehicles; On-Road Heavy Duty), Electric Power (Electricity; Cogeneration), Commercial and Residential (Residential Fuel Use; Commercial Fuel Use) and Recycling and Waste (Domestic Waste Water Treatment).

Result:1990 GHG emissions were 295.53 MMT CO_2e/yr and projected 2020 business-as-usual GHG emissions would be 400.22 MMT CO_2e/yr; thus a 26.2 percent reduction from statewide land use-driven GHG emissions would be necessary to meet the AB 32 goal of returning to 1990 emission levels by 2020. (See Table 2)

Step 2 Estimate the anticipated GHG emission reductions affecting the same land use-driven emissions inventory sectors associated with adopted statewide regulations identified in the AB 32 Scoping Plan.

Result: Estimated a 23.9 percent reduction can be expected in the land use-driven GHG emissions inventory from adopted Scoping Plan regulations, including AB 1493 (Pavley), LCFS, Heavy/Medium Duty Efficiency, Passenger Vehicle Efficiency, Energy-Efficiency Measures, Renewable Portfolio Standard, and Solar Roofs. (See Table 3)

Step 3 Determine any short fall or "gap" between the 2020 statewide emission inventory estimates and the anticipated emission reductions from adopted Scoping Plan regulations. This "gap" represents additional GHG emission reductions needed statewide from the land use-driven emissions inventory sectors, which represents new land use development's share of the emission reductions needed to meet statewide GHG emission reduction goals.

Result: With the 23.9 percent reductions from AB 32 Scoping Measures, there is a "gap" of 2.3 percent in necessary additional GHG emissions reductions to meet AB 32

goals of a 26.2 percent reduction from statewide land use-driven GHG emissions to return to 1990 levels in 2020. (See Table 2)

Step 4 Determine the percent reduction this "gap" represents in the "land use-driven" emissions inventory sectors from BAAQMD's 2020 GHG emissions inventory. Identify the mass of emission reductions needed in the SFBAAB from land use-driven emissions inventory sectors.

Result: Estimated that a 2.3 percent reduction in BAAQMD's projected 2020 emissions projections requires emissions reductions of 1.6 MMT CO_2e/yr from the land use-driven sectors. (See Table 4)

Step 5 Assess BAAQMD's historical CEQA database (2001-2008) to determine the frequency distribution trend of project sizes and types that have been subject to CEQA over the past several years.

Result: Determined historical patterns of residential, commercial and industrial development by ranges of average sizes of each development type. Results were used in Step 6 below to distribute anticipated Bay Area growth among different future project types and sizes.

Step 6 Forecast new land use development for the Bay Area using DOF/EDD population and employment projections and distribute the anticipated growth into appropriate land use types and sizes needed to accommodate the anticipated growth (based on the trend analysis in Step 5 above). Translate the land use development projections into land use categories consistent with those contained in the Urban Emissions Model (URBEMIS).

Result: Based on population and employment projections and the trend analysis from Step 5 above, forecasted approximately 4,000 new development projects, averaging about 400 projects per year through 2020 in the Bay Area.

Step 7 Estimate the amount of GHG emissions from each land use development project type and size using URBEMIS and post-model manual calculation methods (for emissions not included in URBEMIS). Determine the amount of GHG emissions that can reasonably and feasibly be reduced through currently available mitigation measures ("mitigation effectiveness") for future land use development projects subject to CEQA (based on land use development projections and frequency distribution from Step 6 above).

Result: Based on the information available and on sample URBEMIS calculations, found that mitigation effectiveness of between 25 and 30 percent is feasible.

Step 8 Conduct a sensitivity analysis of the numeric GHG mass emissions threshold needed to achieve the desired emissions reduction (i.e., "gap") determined in Step 4. This mass emission GHG threshold is that which would be needed to achieve the emission reductions necessary by 2020 to meet the Bay Area's share of the statewide "gap" needed from the land use-driven emissions inventory sectors.

Result: The results of the sensitivity analysis conducted in Step 8 found that reductions between about 125,000 MT/yr (an aggregate of 1.3 MMT in 2020) and over 200,000 MT/yr (an aggregate of over 2.0 MMT in 2020) were achievable and feasible. A mass emissions threshold of 1,100 MT of CO_2e/yr would result in approximately 59 percent of all projects being above the significance threshold (e.g., this is approximately the operational GHG emissions that would be associated with a 60 residential unit

subdivision) and must implement feasible mitigation measures to meet CEQA requirements. With an estimated 26 percent mitigation effectiveness, the 1,100 MT threshold would achieve 1.6 MMT CO_2e/yr in GHG emissions reductions.

Detailed Basis and Analysis

Derivation of Greenhouse Gas Reduction Goal

To meet the target emissions limit established in AB 32 (equivalent to levels in 1990), total GHG emissions would need to be reduced by approximately 28 percent from projected 2020 forecasts (ARB 2009a). The AB 32 Scoping Plan is ARB's plan for meeting this mandate (ARB 2008). While the Scoping Plan does not specifically identify GHG emission reductions from the CEQA process for meeting AB 32 derived emission limits, the scoping plan acknowledges that "other strategies to mitigate climate change . . . should also be explored." The Scoping Plan also acknowledges that "Some of the measures in the plan may deliver more emission reductions than we expect; others less . . . and new ideas and strategies will emerge." In addition, climate change is considered a significant environmental issue and warrants consideration under CEQA. SB 97 represents the State Legislature's confirmation of this fact, and it directed the Governor's Office of Planning and Research (OPR) to develop CEQA Guidelines for evaluation of GHG emissions impacts and recommend mitigation strategies. In response, OPR released the *Technical Advisory: CEQA and Climate Change* (OPR 2008), and proposed revisions to the State CEQA guidelines (April 14, 2009) for consideration of GHG emissions. The California Natural Resources Agency adopted the proposed State CEQA Guidelines revisions on December 30, 2009 and the revisions were effective beginning March 18, 2010. It is known that new land use development must also do its fair share toward achieving AB 32 goals (or, at a minimum, should not hinder the State's progress toward the mandated emission reductions).

Foreseeable Scoping Plan Measures Emission Reductions and Remaining "Gap"

Step 1 of the Gap Analysis entailed estimating from ARB's statewide GHG inventory the growth in emissions between 1990 and 2020 attributable to land use driven sectors of the emissions inventory. As stated above, to meet the requirements set forth in AB 32 (i.e., achieve California's 1990-equivalent GHG emissions levels by 2020) California would need to achieve an approximate 28 percent reduction in emissions across all sectors of the GHG emissions inventory compared with 2020 projections. However, to meet the AB 32 reduction goals in the emissions sectors that are related to land use development (e.g., on-road passenger and heavy-duty motor vehicles, commercial and residential area sources [i.e., natural gas], electricity generation/consumption, wastewater treatment, and water distribution/consumption), staff determined that California would need to achieve an approximate 26 percent reduction in GHG emissions from these land use-driven sectors (ARB 2009a) by 2020 to return to 1990 land use emission levels.

Next, in Step 2 of the Gap Analysis, Staff determined the GHG emission reductions within the land use-driven sectors that are anticipated to occur from implementation of the Scoping Plan measures statewide, which are summarized in Table 2 and described below. Since the GHG emission reductions anticipated with the Scoping Plan were not accounted for in ARB's or BAAQMD's 2020 GHG emissions inventory forecasts (i.e., business as usual), an adjustment was made to include (i.e., give credit for) GHG emission reductions associated with key Scoping Plans measures, such as the Renewable Portfolio Standard, improvements in energy efficiency through periodic updates to Title 24, AB 1493 (Pavley) (which recently received a federal waiver to allow it to be enacted in law), the Low Carbon Fuel Standard (LCFS), and other measures. With reductions from these State regulations (Scoping Plan measures) taken into consideration and accounting for an estimated 23.9 percent reduction in GHG emissions, in Step 3 of the Gap Analysis Staff determined that the Bay Area would still need to achieve an additional 2.3 percent reduction from projected 2020 GHG emissions to meet the 1990 GHG emissions goal from the

land-use driven sectors. This necessary 2.3 percent reduction in projected GHG emissions from the land use sector is the "gap" the Bay Area needs to fill to do its share to meet the AB 32 goals. Refer to the following explanation and Tables 2 through 4 for data used in this analysis.

Because the transportation sector is the largest emissions sector of the state's GHG emissions inventory, it is aggressively targeted in early actions and other priority actions in the Scoping Plan including measures concerning gas mileage (Pavley), fuel carbon intensity (LCFS) and vehicle efficiency measures.

Table 2 – California 1990, 2002-2004, and 2020 Land Use Sector GHG[1] (MMT CO_2e/yr)

Sector	1990 Emissions	2002-2004 Average	2020 BAU Emissions Projections	% of 2020 Total
Transportation	**137.98**	**168.66**	**209.06**	**52%**
On-Road Passenger Vehicles	108.95	133.95	160.78	40%
On-Road Heavy Duty	29.03	34.69	48.28	12%
Electric Power	**110.63**	**110.04**	**140.24**	**35%**
Electricity	95.39	88.97	107.40	27%
Cogeneration[2]	15.24	21.07	32.84	8%
Commercial and Residential	**44.09**	**40.96**	**46.79**	**12%**
Residential Fuel Use	29.66	28.52	32.10	8%
Commercial Fuel Use	14.43	12.45	14.63	4%
Recycling and Waste[1]	**2.83**	**3.39**	**4.19**	**1%**
Domestic Wastewater Treatment	2.83	3.39	4.19	1%
TOTAL GROSS EMISSIONS	**295.53**	**323.05**	**400.22**	
% Reduction Goal from Statewide land use driven sectors (from 2020 levels to reach 1990 levels in these emission inventory sectors)			26.2%	
% Reduction from AB32 Scoping Plan measures applied to land use sectors (see Table 3)			-23.9%	
% Reduction needed statewide beyond Scoping Plan measures (Gap)			2.3%	

Notes: MMT CO_2e /yr = million metric tons of carbon dioxide equivalent emissions per year.
[1] Landfills not included. See text.
[2] Cogeneration included due to many different applications for electricity, in some cases provides substantial power for grid use, and because electricity use served by cogeneration is often amenable to efficiency requirements of local land use authorities.
Sources: Data compiled by EDAW and ICF Jones & Stokes from ARB data.

Pavley Regulations. The AB 32 Scoping Plan assigns an approximate 20 percent reduction in emissions from passenger vehicles associated with the implementation of AB 1493. The AB 32 Scoping Plan also notes that "AB 32 specifically states that if the Pavley regulations do not remain in effect, ARB shall implement alternative regulations to control mobile sources to achieve

equivalent or greater reductions of greenhouse gas emissions (HSC §38590)." Thus, it is reasonable to assume full implementation of AB 1493 standards, or equivalent programs that would be implemented by ARB. Furthermore, on April 1, 2010, U.S. EPA and the Department of Transportation's National Highway Safety Administration (NHTSA) announced a joint final rule establishing a national program that will dramatically reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States after 2011. Under this national program, automobile manufacturers will be able to build a single light-duty national fleet that satisfies all requirements under both the national program and the standards of California and other states. Nonetheless, BAAQMD may need to revisit this methodology as the federal standards come on line to ensure that vehicle standards are as aggressive as contemplated in development of this threshold.

Table 3 – 2020 Land Use Sector GHG Emission Reductions from State Regulations and AB 32 Measures

Affected Emissions Source	California Legislation	% Reduction from 2020 GHG inventory	End Use Sector (% of Bay Area LU Inventory)	Scaled % Emissions Reduction (credit)
Mobile	AB 1493 (Pavley)	19.7%	On road passenger/light truck transportation (45%)	8.9%
	LCFS	7.2%	On road passenger/light truck transportation (45%)	3.2%
	LCFS	7.2%	On road Heavy/Medium Duty Transportation (5%)	0.4%
	Heavy/Medium Duty Efficiency	2.9%	On road Heavy/Medium Duty Transportation (5%)	0.2%
	Passenger Vehicle Efficiency	2.8%	On road passenger/light truck transportation (45%)	1.3%
Area	Energy-Efficiency Measures	9.5%	Natural gas (Residential, 10%)	1.0%
			Natural gas (Non-residential, 13%)	1.2%
Indirect	Renewable Portfolio Standard	21.0%	Electricity (excluding cogen) (17%)	3.5%
	Energy-Efficiency Measures	15.7%	Electricity (26%)	4.0%
	Solar Roofs	1.5%	Electricity (excluding cogen) (17%)	0.2%
Total credits given to land use-driven emission inventory sectors from Scoping Plan measures				**23.9%**

Notes: AB = Assembly Bill; LCFS = Low Carbon Fuel Standard; SB = Senate Bill; RPS = Renewable Portfolio Standard
Sources: Data compiled by ICF Jones & Stokes.

LCFS. According to the adopted LCFS rule (CARB, April 2009), the LCFS is expected to result in approximately 10 percent reduction in the carbon intensity of transportation fuels. However, a

portion of the emission reductions required from the LCFS would be achieved over the life cycle of transportation fuel production rather than from mobile-source emission factors. Based on CARB's estimate of nearly 16 MMT reductions in on-road emissions from implementation of the LCFS and comparison to the statewide on-road emissions sector, the LCFS is assumed to result in a 7.2 percent reduction compared to 2020 BAU conditions (CARB 2009e).

Table 4 – SFBAAB 1990, 2007, and 2020 Land Use Sector GHG Emissions Inventories and Projections (MMT CO_2e/yr)

Sector	1990 Emissions	2007 Emissions	2020 Emissions Projections	% of 2020 Total[2]
Transportation	**26.1**	**30.8**	**35.7**	**50%**
On-Road Passenger Vehicles	23.0	27.5	32.0	
On-Road Heavy Duty	3.1	3.3	3.7	
Electric Power	**25.1**	**15.2**	**18.2**	**26%**
Electricity	16.5	9.9	11.8	
Cogeneration	8.6	5.3	6.4	
Commercial and Residential	**8.9**	**15.0**	**16.8**	**24%**
Residential Fuel Use	5.8	7.0	7.5	
Commercial Fuel Use	3.1	8.0	9.3	
Recycling and Waste[1]	**0.2**	**0.4**	**0.4**	**1%**
Domestic Waste Water Treatment	0.2	0.4	0.4	
TOTAL GROSS EMISSIONS	**60.3**	**61.4**	**71.1**	
SFBAAB's "Fair Share" % Reduction (from 2020 levels to reach 1990 levels) with AB-32 Reductions (from Table 3)			2.3%	
SFBAAB's Equivalent Mass Emissions Land Use Reduction Target at 2020 (MMT CO2e/yr)			1.6	

Notes: MMT CO_2e /yr = million metric tons of carbon dioxide equivalent emissions per year; SFBAAB = San Francisco Bay Area Air Basin.
[1] Landfills not included.
[2] Percentages do not sum exactly to 100% in table due to rounding.
Sources: Data compiled by EDAW 2009, ICF Jones & Stokes 2009, BAAQMD 2008.

Renewable Portfolio Standard, Energy Efficiency and Solar Roofs. Energy efficiency and renewable energy measures from the Scoping Plan were also included in the gap analysis. The Renewable Portfolio Standard (rules) will require the renewable energy portion of the retail electricity portfolio to be 33 percent in 2020. For PG&E, the dominant electricity provider in the Basin, approximately 12 percent of their current portfolio qualifies under the RPS rules and thus the gain by 2020 would be approximately 21 percent. The Scoping Plan also estimates that energy efficiency gains with periodic improvement in building and appliance energy standards and incentives will reach 10 to 15 percent for natural gas and electricity respectively. The final state measure included in this gap analysis is the solar roof initiative, which is estimated to result in reduction of the overall electricity inventory of 1.5 percent.

Landfill emissions are excluded from this analysis. While land use development does generate waste related to both construction and operations, the California Integrated Waste Management Board (CIWMB) has mandatory diversion requirements that will, in all probability, increase over time to promote waste reductions, reuse, and recycle. The Bay Area has relatively high levels of waste diversion and extensive recycling efforts. Further, ARB has established and proposes to increase methane capture requirements for all major landfills. Thus, at this time, landfill emissions associated with land use development waste generation is not included in the land use sector inventory used to develop this threshold approach.

Industrial stationary sources thresholds were developed separately from the land use threshold development using a market capture approach as described below. However, mobile source and area source emissions, as well as indirect electricity emissions that derive from industrial use are included in the land use inventory above as these particular activities fall within the influence of local land use authorities in terms of the affect on trip generation and energy efficiency.

AB 32 mandates reduction to 1990-equivalent GHG levels by 2020, with foreseeable emission reductions from State regulations and key Scoping Plan measures taken into account, were applied to the land use-driven emission sectors within the SFBAAB (i.e., those that are included in the quantification of emissions from a land use project pursuant to a CEQA analysis [on-road passenger vehicles, commercial and residential natural gas, commercial and residential electricity consumption, and domestic waste water treatment], as directed by OPR in the Technical Advisory: *Climate Change and CEQA* [OPR 2008]). This translates to a 2.3 percent gap in necessary GHG emission reductions by 2020 from these sectors.

Land Use Projects Bright Line Threshold

In Steps 4 and 5 of the gap analysis, Staff determined that applying a 2.3 percent reduction to these land use emissions sectors in the SFBAAB's GHG emissions inventory would result in an equivalent fair share of 1.6 million metric tons per year (MMT/yr) reductions in GHG emissions from new land use development. As additional regulations and legislation aimed at reducing GHG emissions from land use-related sectors become available in the future, the 1.6 MMT GHG emissions reduction goal may be revisited and recalculated by BAAQMD.

In order to derive the 1.6 MMT "gap," a projected development inventory for the next ten years in the SFBAAB was calculated (see Table 4 and *Revised Draft Options and Justifications Report* (BAAQMD 2009)). CO_2e emissions were modeled for projected development in the SFBAAB and compiled to estimate the associated GHG emissions inventory. The GHG (i.e., CO_2e) CEQA threshold level was adjusted for projected land use development that would occur within BAAQMD's jurisdiction over the period from 2010 through 2020.

Projects with emissions greater than the threshold would be required to mitigate to the threshold level or reduce project emissions by a percentage (mitigation effectiveness) deemed feasible by the lead agency under CEQA compared to a base year condition. The base year condition is defined by an equivalent size and character of project with annual emissions using the defaults in URBEMIS and the California Climate Action Registry's General Reporting Protocol for 2008. By this method, land use project mitigation subject to CEQA would help close the "gap" remaining after application of the key regulations and measures noted above supporting overall AB 32 goals.

This threshold takes into account Steps 1-8 of the gap analysis described above to arrive at a numerical mass emissions threshold. Various mass emissions significance threshold levels (i.e., bright lines) could be chosen based on the mitigation effectiveness and performance anticipated to be achieved per project to meet the aggregate emission reductions of 1.6 MMT needed in the

SFBAAB by 2020(see Table 5 and *Revised Draft Options and Justifications Report* (BAAQMD 2009)). Staff recommends a 1,100 MT CO_2e per year threshold. Choosing a 1,100 MT mass emissions significance threshold level (equivalent to approximately 60 single-family units), would result in about 59 percent of all projects being above the significance threshold and having to implement feasible mitigation measures to meet their CEQA obligations. These projects account for approximately 92 percent of all GHG emissions anticipated to occur between now and 2020 from new land use development in the SFBAAB.

Project applicants and lead agencies could use readily available computer models to estimate a project's GHG emissions, based on project specific attributes, to determine if they are above or below the bright line numeric threshold. With this threshold, projects that are above the threshold level, after consideration of emission-reducing characteristics of the project as proposed, would have to reduce their emissions to below the threshold to be considered less than significant.

Table 5 – Operational GHG Threshold Sensitivity Analysis

Option	Mitigation Effectiveness Assumptions		Mass Emission Threshold Level (MT CO_2e/yr)	% of Projects Captured (>threshold)	% of Emissions Captured (> threshold)	Emissions Reduction per year (MT/yr)	Aggregate Emissions Reduction (MMT) at 2020	Threshold Project Size Equivalent (single family dwelling units)
	Performance Standards Applied to All Projects with Emissions < Threshold Level	Mitigation Effectiveness Applied to Emissions > Threshold Level						
1A	N/A	30%	975	60%	93%	201,664	2.0	53
1A	N/A	25%	110	96%	100%	200,108	2.0	66
1A	N/A	30%	1,225	21%	67%	159,276	1.6	67
1A	N/A	26%	1,100	59%	92%	159,877	1.6	60
1A	N/A	30%	2,000	14%	61%	143,418	1.4	109
1A	N/A	25%	1,200	58%	92%	136,907	1.4	66
1A	N/A	30%	3,000	10%	56%	127,427	1.3	164
1A	N/A	25%	1,500	20%	67%	127,303	1.3	82
1B	26%	N/A	N/A	100%	100%	208,594	2.1	N/A[1]
1C	5%	30%	1,900	15%	62%	160,073	1.6	104
1C	10%	25%	1,250	21%	67%	159,555	1.6	68
1C	5%	30%	3,000	10%	56%	145,261	1.5	164
1C	10%	25%	2,000	4%	61%	151,410	1.5	109
1C	10%	30%	10,000	2%	33%	125,271	1.3	547

MMT = million metric tons per year; MT CO_2e/yr = metric tons of carbon dioxide equivalent emissions per year; MT/yr = metric tons per year; N/A = not applicable.

[1] Any project subject to CEQA would trigger this threshold.

Source: Data modeled by ICF Jones& Stokes

Source: Data modeled by ICF Jones & Stokes.

Establishing a "bright line" to determine the significance of a project's GHG emissions impact provides a level of certainty to lead agencies in determining if a project needs to reduce its GHG emissions through mitigation measures and when an EIR is required.

Land Use Projects Efficiency-Based Threshold

GHG efficiency metrics can also be utilized as thresholds to assess the GHG efficiency of a project on a per capita basis (residential only projects) or on a "service population" basis (the sum of the number of jobs and the number of residents provided by a project) such that the project will allow for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020). GHG efficiency thresholds can be determined by dividing the GHG emissions inventory goal (allowable emissions), by the estimated 2020 population and employment. This method allows highly efficient projects with higher mass emissions to meet the overall reduction goals of AB 32. Staff believes it is more appropriate to base the land use efficiency threshold on the service population metric for the land use-driven emission inventory. This approach is appropriate because the threshold can be applied evenly to all project types (residential or commercial/retail only and mixed use) and uses only the land use emissions inventory that is comprised of all land use projects. Staff will provide the methodology to calculate a project's GHG emissions in the revised CEQA Guidelines, such as allowing infill projects up to a 50 percent or more reduction in daily vehicle trips if the reduction can be supported by close proximity to transit and support services, or a traffic study prepared for the project.

Table 6 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - Land Use Inventory Sectors

Land Use Sectors Greenhouse Gas Emissions Target	295,530,000
Population	44,135,923
Employment	20,194,661
California Service Population (Population + Employment)	64,330,584
AB 32 Goal GHG emissions (metric tons CO_2e)/SP[1]	**4.6**

Notes: AB = Assembly Bill; CO_2e = carbon dioxide equivalent; GHG = greenhouse gas; SP = service population.
[1] Greenhouse gas efficiency levels were calculated using only the "land use-related" sectors of ARB's emissions inventory.
Sources: Data compiled by EDAW 2009, ARB 2009a, DOF 2009, EDD 2009, ICF Jones & Stokes 2009.

Staff proposes a project-level efficiency threshold of 4.6 MT CO_2e/SP, the derivation of which is shown Table 6. This efficiency-based threshold reflects very GHG-efficient projects. As stated previously and below, staff anticipates that significance thresholds (rebuttable presumptions of significance at the project level) will function on an interim basis only until adequate programmatic approaches are in place at the city, county, and regional level that will allow the CEQA streamlining of individual projects. (See State CEQA Guidelines §15183.5 ["Tiering and Streamlining the Analysis of Greenhouse Gas Emissions"]).

2.2.3. Plan-Level GHG Thresholds

Staff proposes using a two step process for determining the significance of proposed plans and plan amendments for GHG. As a first step in assessing plan-level impacts, Staff is proposing that agencies that have adopted a qualified Greenhouse Gas Reduction Strategy (or have incorporated similar criteria in their general plan) and the general plan is consistent with the Greenhouse Gas Reduction Strategy, the general plan would be considered less than significant. In addition, as discussed above for project-level GHG impacts, Staff is proposing an efficiency

threshold to assess plan-level impacts. Staff believes a programmatic approach to limiting GHG emissions is appropriate at the plan-level. Thus, as projects consistent with the Greenhouse Gas Reduction Strategy are proposed, they may be able to tier off the plan and its environmental analysis.

GHG Efficiency Metrics for Plans

For local land use plans, a GHG-efficiency metric (e.g., GHG emissions per unit) would enable comparison of a proposed general plan to its alternatives and to determine if the proposed general plan meets AB 32 emission reduction goals.

AB 32 identifies local governments as essential partners in achieving California's goal to reduce GHG emissions. Local governments have primary authority to plan, zone, approve, and permit how and where land is developed to accommodate population growth and the changing needs of their jurisdiction. ARB has developed the Local Government Operations Protocol and is developing a protocol to estimate community-wide GHG emissions. ARB encourages local governments to use these protocols to track progress in reducing GHG emissions. ARB encourages local governments to institutionalize the community's strategy for reducing its carbon footprint in its general plan. SB 375 creates a process for regional integration of land development patterns and transportation infrastructure planning with the primary goal of reducing GHG emissions from the largest sector of the GHG emission inventory, light duty vehicles.

If the statewide AB 32 GHG emissions reduction context is established, GHG efficiency can be viewed independently from the jurisdiction in which the plan is located. Expressing projected 2020 mass of emissions from land use-related emissions sectors by comparison to a demographic unit (e.g., population and employment) provides evaluation of the GHG efficiency of a project in terms of what emissions are allowable while meeting AB 32 targets.

Two approaches were considered for efficiency metrics. The "service population" (SP) approach would consider efficiency in terms of the GHG emissions compared to the sum of the number of jobs and the number of residents at a point in time. The per capita option would consider efficiency in terms of GHG emissions per resident only. Staff recommends that the efficiency threshold for plans be based on all emission inventory sectors because, unlike land use projects, general plans comprise more than just land use related emissions (e.g. industrial). Further, Staff recommends that the plan threshold be based on the service population metric as general plans include a mix of residents and employees. The Service Population metric would allow decision makers to compare GHG efficiency of general plan alternatives that vary residential and non-residential development totals, encouraging GHG efficiency through improving jobs/housing balance. This approach would not give preference to communities that accommodate more residential (population-driven) land uses than non-residential (employment driven) land uses which could occur with the per capita approach.

A SP-based GHG efficiency metric (see Table 7) was derived from the emission rates at the State level that would accommodate projected population and employment growth under trend forecast conditions, and the emission rates needed to accommodate growth while allowing for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020).

Table 7 – California 2020 GHG Emissions, Population Projections and GHG Efficiency Thresholds - All Inventory Sectors	
All Inventory Sectors Greenhouse Gas Emissions Target	426,500,000
Population	44,135,923
Employment	20,194,661
California Service Population (Population + Employment)	64,330,584
AB 32 Goal GHG emissions (metric tons CO_2e)/SP[1]	**6.6**

Notes: AB = Assembly Bill; CO_2e = carbon dioxide equivalent; GHG = greenhouse gas; SP = service population.
[1] Greenhouse gas efficiency levels were calculated using only the "land use-related" sectors of ARB's emissions inventory.
Sources: Data compiled by EDAW 2009, ARB 2009a, DOF 2009, EDD 2009, ICF Jones & Stokes 2009.

If a general plan demonstrates, through dividing the emissions inventory projections (MT CO_2e) by the amount of growth that would be accommodated in 2020, that it could meet the GHG efficiency metrics in this section (6.6 MT CO_2e/SP from all emission sectors, as noted in Table 7), then the amount of GHG emissions associated with the general plan would be considered less than significant, regardless of its size (and magnitude of GHG emissions). In other words, the general plan would accommodate growth in a manner that would not hinder the State's ability to achieve AB 32 goals, and thus, would be less than significant for GHG emissions and their contribution to climate change. The efficiency metric would not penalize well-planned communities that propose a large amount of development. Instead, the SP-based GHG efficiency metric acts to encourage the types of development that BAAQMD and OPR support (i.e., infill and transit-oriented development) because it tends to reduce GHG and other air pollutant emissions overall, rather than discourage large developments for being accompanied by a large mass of GHG emissions. Plans that are more GHG efficient would have no or limited mitigation requirements to help them complete the CEQA process more readily than plans that promote GHG inefficiencies, which will require detailed design of mitigation during the CEQA process and could subject a plan to potential challenge as to whether all feasible mitigation was identified and adopted. This type of threshold can shed light on a well-planned general plan that accommodates a large amount of growth in a GHG-efficient way.

When analyzing long-range plans, such as general plans, it is important to note that the planning horizon will often surpass the 2020 timeframe for implementation of AB 32. Executive Order S-3-05 establishes a more aggressive emissions reduction goal for the year 2050 of 80 percent below 1990 emissions levels. The year 2020 should be viewed as a milestone year, and the general plan should not preclude the community from a trajectory toward the 2050 goal. However, the 2020 timeframe is examined in this threshold evaluation because doing so for the 2050 timeframe (with respect to population, employment, and GHG emissions projections) would be too speculative. Advances in technology and policy decisions at the state level will be needed to meet the aggressive 2050 goals. It is beyond the scope of the analysis tools available at this time to examine reasonable emissions reductions that can be achieved through CEQA analysis in the year 2050. As the 2020 timeframe draws nearer, BAAQMD will need to reevaluate the threshold to better represent progress toward 2050 goals.

2.2.4. Greenhouse Gas Reduction Strategies

Finally, many local agencies have already undergone or plan to undergo efforts to create general or other plans that are consistent with AB 32 goals. The Air District encourages such planning efforts and recognizes that careful upfront planning by local agencies is invaluable to achieving

the state's GHG reduction goals. If a project is consistent with an adopted Qualified Greenhouse Gas Reduction Strategy that addresses the project's GHG emissions, it can be presumed that the project will not have significant GHG emission impacts. This approach is consistent with CEQA Guidelines Sections 15064(h)(3) and 15183.5(b), which provides that a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem."

A qualified Greenhouse Gas Reduction Strategy (or similar adopted policies, ordinances and programs) is one that is consistent with all of the AB 32 Scoping Plan measures and goals. The Greenhouse Gas Reduction Strategy should identify a land use design, transportation network, goals, policies and implementation measures that would achieve AB 32 goals. Strategies with horizon years beyond 2020 should consider continuing the downward reduction path set by AB 32 and move toward climate stabilization goals established in Executive Order S-3-05.

Qualified Greenhouse Gas Reduction Strategy

A qualified Greenhouse Gas Reduction Strategy adopted by a local jurisdiction should include the following elements as described in the State CEQA Guidelines Section 15183.5. BAAQMD's revised CEQA Guidelines provides the methodology to determine if a Greenhouse Gas Reduction Strategy meets these requirements.

(A) Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;

(B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;

(C) Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;

(D) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;

(E) Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels;

(F) Be adopted in a public process following environmental review.

Local Climate Action Policies, Ordinances and Programs

Air District staff recognizes that many communities in the Bay Area have been proactive in planning for climate change but have not yet developed a stand-alone Greenhouse Gas Reduction Strategy that meets the above criteria. Many cities and counties have adopted climate action policies, ordinances and program that may in fact achieve the goals of AB 32 and a qualified Greenhouse Gas Reduction Strategy. Staff recommends that if a local jurisdiction can demonstrate that its collective set of climate action policies, ordinances and other programs is consistent with AB 32 and State CEQA Guidelines Section 15183.5, includes requirements or feasible measures to reduce GHG emissions and achieves one of the following GHG emission reduction goals,[5] the AB 32 consistency demonstration should be considered equivalent to a qualified Greenhouse Gas Reduction Strategy:

[5] Lead agencies using consistency with their jurisdiction's climate action policies, ordinances and programs as a measure of significance under CEQA Guidelines section 15064(h)(3) and

- 1990 GHG emission levels,
- 15 percent below 2008 emission levels, or
- Meet the plan efficiency threshold of 6.6 MT CO_2e/service population/year.

Qualified Greenhouse Gas Reduction Strategies that are tied to the AB 32 reduction goals would promote reductions on a plan level without impeding the implementation of GHG-efficient development, and would recognize the initiative of many Bay Area communities who have already developed or are in the process of developing a GHG reduction plan. The details required above for a qualified Greenhouse Gas Reduction Strategy (or similar adopted policies, ordinances and programs) would provide the evidentiary basis for making CEQA findings that development consistent with the plan would result in feasible, measureable, and verifiable GHG reductions consistent with broad state goals such that projects approved under qualified Greenhouse Gas Reduction Strategies or equivalent demonstrations would achieve their fair share of GHG emission reductions.

GHG Thresholds for Regional Plans

Regional plans include the Regional Transportation Plan prepared by the Metropolitan Transportation Commission (MTC) and air quality plans prepared by the Air District.

The Regional Transportation Plan (RTP), also called a Metropolitan Transportation Plan (MTP) or Long-Range Transportation Plan is the mechanism used in California by both Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs) to conduct long-range (minimum of 20 years) planning in their regions. MTC functions as both the regional transportation planning agency, a state designation, and, for federal purposes, as the region's metropolitan planning organization (MPO). As such, it is responsible for regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of the Bay Area's transportation system that includes mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. The performance of this system affects such public policy concerns as air quality, environmental resource consumption, social equity, "smart growth," economic development, safety, and security. Transportation planning recognizes the critical links between transportation and other societal goals. The planning process requires developing strategies for operating, managing, maintaining, and financing the area's transportation system in such a way as to advance the area's long-term goals.

The Air District periodically prepares and updates plans to achieve the goal of healthy air. Typically, a plan will analyze emissions inventories (estimates of current and future emissions from industry, motor vehicles, and other sources) and combine that information with air monitoring data (used to assess progress in improving air quality) and computer modeling simulations to test future strategies to reduce emissions in order to achieve air quality standards. Air quality plans usually include measures to reduce air pollutant emissions from industrial facilities, commercial processes, motor vehicles, and other sources. Bay Area air quality plans are prepared with the cooperation of MTC, the Association of Bay Area Governments (ABAG) and the Bay Conservation and Development Commission (BCDC).

The threshold of significance for regional plans is no net increase in emissions including greenhouse gas emissions. This threshold serves to answer the State CEQA Guidelines

15183.5(b) should ensure that the policies, ordinances and programs satisfy all of the requirements of that subsection before relying on them in a CEQA analysis.

Appendix G sample question: "Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?"

2.2.5. Stationary Source GHG Threshold

Staff's recommended threshold for stationary source GHG emissions is based on estimating the GHG emissions from combustion sources for all permit applications submitted to the Air District in 2005, 2006 and 2007. The analysis is based only on CO_2 emissions from stationary sources, as that would cover the vast majority of the GHG emissions due to stationary combustion sources in the SFBAAB. The estimated CO_2 emissions were calculated for the maximum permitted amount, i.e. emissions that would be emitted if the sources applying for a permit application operate at maximum permitted load and for the total permitted hours. All fuel types are included in the estimates. For boilers burning natural gas, diesel fuel is excluded since it is backup fuel and is used only if natural gas is not available. Emission values are estimated before any offsets (i.e., Emission Reduction Credits) are applied. GHG emissions from mobile sources, electricity use and water delivery associated with the operation of the permitted sources are not included in the estimates.

It is projected that a threshold level of 10,000 metric tons of CO_2e per year would capture approximately 95 percent of all GHG emissions from new permit applications from stationary sources in the SFBAAB. That threshold level was calculated as an average of the combined CO_2 emissions from all stationary source permit applications submitted to the Air District during the three year analysis period.

Staff recommends this 10,000 MT of CO_2/yr as it would address a broad range of combustion sources and thus provide for a greater amount of GHG reductions to be captured and mitigated through the CEQA process. As documented in the Scoping Plan, in order to achieve statewide reduction targets, emissions reductions need to be obtained through a broad range of sources throughout the California economy and this threshold would achieve this purpose. While this threshold would capture 95 percent of the GHG emissions from new permit applications, the threshold would do so by capturing only the large, significant projects. Permit applications with emissions above the 10,000 MT of CO_2/yr threshold account for less than 10 percent of stationary source permit applications which represent 95 percent of GHG emissions from new permits analyzed during the three year analysis period.

This threshold would be considered an interim threshold and Air District staff will reevaluate the threshold as AB 32 Scoping Plan measures such as cap and trade are more fully developed and implemented at the state level.

2.2.6. Summary of Justification for GHG Thresholds

The bright-line numeric threshold of 1,100 MT CO_2e/yr is a numeric emissions level below which a project's contribution to global climate change would be less than "cumulatively considerable." This emissions rate is equivalent to a project size of approximately 60 single-family dwelling units, and approximately 59 percent of all future projects and 92 percent of all emissions from future projects would exceed this level. For projects that are above this bright-line cutoff level, emissions from these projects would still be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 MT CO_2e per service population or better for mixed-use projects. Projects with emissions above 1,100 MT CO_2e/yr would still be less than significant if they achieved project efficiencies below these levels. If projects as proposed exceed these levels, they would be required to implement mitigation measures to bring them back below the 1,100 MT CO_2e/yr bright-line cutoff or within the 4.6 MT CO_2e Service Population efficiency threshold. If mitigation did not bring a project back within the threshold requirements, the project would be cumulatively significant and could be approved only with a Statement of Overriding

Considerations and a showing that all feasible mitigation measures have been implemented. Projects' GHG emissions would also be less than significant if they comply with a Qualified Greenhouse Gas Reduction Strategy.

As explained in the preceding analyses of these thresholds, the greenhouse gas emissions from land use projects expected between now and 2020 built in compliance with these thresholds would be approximately 26 percent below BAU 2020 conditions and thus would be consistent with achieving an AB 32 equivalent reduction. The 26 percent reduction from BAU 2020 from new projects built in conformance with these thresholds would achieve an aggregate reduction of approximately 1.6 MMT CO_2e/yr, which is the level of emission reductions from new Bay Area land use sources needed to meet the AB 32 goals, per ARB's Scoping Plan as discussed above.

Projects with greenhouse gas emissions in conformance with these thresholds would not be considered significant for purposes of CEQA. Although the emissions from such projects would add an incremental amount to the overall greenhouse gas emissions that cause global climate change impacts, emissions from projects consistent with these thresholds would not be a "cumulatively considerable" contribution under CEQA. Such projects would not be "cumulatively considerable" because they would be helping to solve the cumulative problem as a part of the AB 32 process.

California's response to the problem of global climate change is to reduce greenhouse gas emissions to 1990 levels by 2020 under AB 32 as a near-term measure and ultimately to 80 percent below 1990 levels by 2050 as the long-term solution to stabilizing greenhouse gas concentrations in the atmosphere at a level that will not cause unacceptable climate change impacts. To implement this solution, the Air Resources Board has adopted a Scoping Plan and budgeted emissions reductions that will be needed from all sectors of society in order to reach the interim 2020 target.

The land-use sector in the Bay Area needs to achieve aggregate emission reductions of approximately 1.6 MMT CO_2e/yr from new projects between now and 2020 to achieve this goal, as noted above, and each individual new project will need to achieve its own respective portion of this amount in order for the Bay Area land use sector as a whole to achieve its allocated emissions target. Building all of the new projects expected in the Bay Area between now and 2020 in accordance with the thresholds that District staff are proposing will achieve the overall appropriate share for the land use sector, and building each individual project in accordance with the thresholds will achieve that individual project's respective portion of the emission reductions needed to implement the AB 32 solution. For these reasons, projects built in conformance with the thresholds will be part of the solution to the cumulative problem, and not part of the continuing problem. They will allow the Bay Area's land use sector to achieve the emission reductions necessary from that sector for California to implement its solution to the cumulative problem of global climate change. As such, even though such projects will add an incremental amount of greenhouse gas emissions, their incremental contribution will be less than "cumulatively considerable" because they are helping to achieve the cumulative solution, not hindering it. Such projects will not be "significant" for purposes of CEQA (see CEQA Guidelines §15064(h)(1)).

The conclusion that land use projects that comply with these thresholds is also supported by CEQA Guidelines Section 15030(a)(3), which provides that a project's contribution to a cumulative problem can be less that cumulatively considerable "if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact." In the case of greenhouse gas emissions associated with land use projects, achieving the amount of emission reductions below BAU that will be required to achieve the AB 32 goals is the project's "fair share" of the overall emission reductions needed under ARB's scoping plan to reach the overall statewide AB 32 emissions levels for 2020. If a project is

designed to implement greenhouse gas mitigation measures that achieve a level of reductions consistent with what is required from all new land use projects to achieve the land use sector "budget" – *i.e.*, keeping overall project emissions below 1,100 MT CO_2e/yr or ensuring that project efficiency is better than 4.6 MT CO_2e/service population – then it will be implementing its share of the mitigation measures necessary to alleviate the cumulative impact, as shown in the analyses set forth above.

It is also worth noting that this "fair share" approach is flexible and will allow a project's significance to be determined by how well it is designed from a greenhouse gas efficiency standpoint, and not just by the project's size. For example, a large high-density infill project located in an urban core nearby to public transit and other alternative transportation options, and built using state-of-the-art energy efficiency methods and improvements such as solar panels, as well as all other feasible mitigation measures, would not become significant for greenhouse gas purposes (and thus require a Statement of Overriding Considerations in order to be approved) simply because it happened to be a large project. Projects such as this hypothetical development with low greenhouse gas emissions per service population are what California will need in the future in order to do its part in achieving a solution to the problem of global climate change. The determination of significance under CEQA should take these factors into account, and the significance thresholds would achieve this important policy goal. In all, land use sector projects that comply with the GHG thresholds would not be "cumulatively considerable" because they would be helping to solve the cumulative problem as a part of the AB 32 process.

Likewise, new Air District permit applications for stationary sources that comply with the quantitative threshold of 10,000 MT CO_2e/yr would not be "cumulatively considerable" because they also would not hinder the state's ability to solve the cumulative greenhouse gas emissions problem pursuant to AB 32. Unlike the land use sector, the AB 32 Scoping Plan measures, including the cap-and-trade program, provide for necessary emissions reductions from the stationary source sector to achieve AB 32 2020 goals.

While stationary source projects will need to comply with the cap-and-trade program once it is enacted and reduce their emissions accordingly, the program will be phased in over time starting in 2012 and at first will only apply to the very largest sources of GHG emissions. In the mean time, certain stationary source projects, particularly those with large GHG emissions, still will have a cumulatively considerable impact on climate change. The 10,000 MT CO_2e/yr threshold will capture 95 percent of the stationary source sector GHG emissions in the Bay Area. The five percent of emissions that are from stationary source projects below the 10,000 MT CO_2e/yr threshold account for a small portion of the Bay Area's total GHG emissions from stationary sources and these emissions come from very small projects. Such small stationary source projects will not significantly add to the global problem of climate change, and they will not hinder the Bay Area's ability to reach the AB 32 goal in any significant way, even when considered cumulatively. In Air District's staff's judgment, the potential environmental benefits from requiring EIRs and mitigation for these projects would be insignificant. In all, based on staff's expertise, stationary source projects with emissions below 10,000 MT CO_2e/yr will not provide a cumulatively considerable contribution to the cumulative impact of climate change.

3. COMMUNITY RISK AND HAZARD THRESHOLDS

To address community risk from air toxics, the Air District initiated the Community Air Risk Evaluation (CARE) program in 2004 to identify locations with high levels of risk from ambient toxic air contaminants (TAC) co-located with sensitive populations and use the information to help focus mitigation measures. Through the CARE program, the Air District developed an inventory of

TAC emissions for 2005 and compiled demographic and health indicator data. According to the findings of the CARE Program, diesel PM—mostly from on and off-road mobile sources—accounts for over 80 percent of the inhalation cancer risk from TACs in the Bay Area (BAAQMD 2006).

The Air District applied a regional air quality model using the 2005 emission inventory data to estimate excess cancer risk from ambient concentrations of important TAC species, including diesel PM, 1,3-butadiene, benzene, formaldehyde and acetaldehyde. The highest cancer risk levels from ambient TAC in the Bay Area tend to occur in the core urban areas, along major roadways and adjacent to freeways and port activity. Cancer risks in areas along these major freeways are estimated to range from 200 to over 500 excess cases in a million for a lifetime of exposure. Priority communities within the Bay Area – defined as having higher emitting sources, highest air concentrations, and nearby low income and sensitive populations – include the urban core areas of Concord, eastern San Francisco, western Alameda County, Redwood City/East Palo Alto, Richmond/San Pablo, and San Jose.

Fifty percent of BAAQMD's population was estimated to have an ambient background inhalation cancer risk of less than 500 cases in one million, based on emission levels in 2005. Table 8 presents a summary of percentages of the population exposed to varying levels of cancer risk from ambient TACs. Approximately two percent of the SFBAAB population is exposed to background risk levels of less than 200 excess cases in one million. This is in contrast to the upper percentile ranges where eight percent of the SFBAAB population is exposed to background risk levels of greater than 1,000 excess cases per one million. To identify and reduce risks from TAC, this chapter presents thresholds of significance for both cancer risk and non-cancer health hazards.

Table 8 – Statistical Summary of Estimated Population-Weighted Ambient Cancer Risk in 2005

Percentage of Population (Percent below level of ambient risk)	Ambient Cancer Risk (inhalation cancer cases in one million)
92	1,000
90	900
83	800
77	700
63	600
50	500
32	400
13	300
2	200
<1	100

Source: Data compiled by EDAW 2009.

Many scientific studies have linked fine particulate matter and traffic-related air pollution to respiratory illness (Hiltermann et al. 1997, Schikowski et al 2005, Vineis et al. 2007) and premature mortality (Dockery 1993, Pope et al. 1995, Jerrett et al. 2005). Traffic-related air pollution is a complex mix of chemical compounds (Schauer et al. 2006), often spatially correlated

with other stressors, such as noise and poverty (Wheeler and Ben-Shlomo 2005). While such correlations can be difficult to disentangle, strong evidence for adverse health effects of fine particulate matter ($PM_{2.5}$) has been developed for regulatory applications in a study by the U.S, EPA. This study found that a 10 percent increase in $PM_{2.5}$ concentrations increased the non-injury death rate by 10 percent (U.S. EPA 2006).

Public Health Officers for four counties in the San Francisco Bay Area in 2009 provided testimony to the Air District's Advisory Council (February 11, 2009, Advisory Council Meeting on Air Quality and Public Health). Among the recommendations made, was that $PM_{2.5}$, in addition to TACs, be considered in assessments of community-scale impacts of air pollution. In consideration of the scientific studies and recommendations by the Bay Area Health Directors, it is apparent that, in addition to the significance thresholds for local-scale TAC, thresholds of significance are required for near-source, local-scale concentrations of $PM_{2.5}$.

3.1. THRESHOLDS OF SIGNIFICANCE

The thresholds of significance and Board-requested options are presented in this section:

- The **Staff Proposal** includes thresholds for cancer risk, non-cancer health hazards, and fine particulate matter.
- **Tiered Thresholds Option** includes tiered thresholds for new sources in impacted communities. Thresholds for receptors and cumulative impacts are the same as the Staff Proposal.

Proposal/Option	Construction-Related	Operational-Related
Project-Level – Individual Project		
Risks and Hazards – New Source (All Areas) (Individual Project) **Staff Proposal**	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 µg/m^3 annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor

Proposal/Option	Construction-Related	Operational-Related
Risks and Hazards – New Receptor (All Areas) (Individual Project) **Staff Proposal**	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 µg/m^3 annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor
Risks and Hazards (Individual Project) **Tiered Thresholds Option**	Same as Operational Thresholds*	**Impacted Communities:** Siting a New Source Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >5.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.2 µg/m^3 annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor
	Same as Operational Thresholds*	**Impacted Communities:** Siting a New Receptor **All Other Areas:** Siting a New Source or Receptor Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 µg/m^3 annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant
Project-Level – Cumulative		

Proposal/Option	Construction-Related	Operational-Related
Risks and Hazards – New Source (All Areas) (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) $PM_{2.5}$: > 0.8 µg/m^3 annual average (from all local sources) Zone of Influence: 1,000-foot radius from fence line of source or receptor
Risks and Hazards – New Receptor (All Areas) (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) $PM_{2.5}$: > 0.8 µg/m^3 annual average (from all local sources) Zone of Influence: 1,000-foot radius from fence line of source or receptor
Plan-Level		
Risks and Hazards	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas). 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways.
Accidental Release of Acutely Hazardous Air Pollutants	None	None
Regional Plans (Transportation and Air Quality Plans)		
Risks and Hazards	None	No net increase in toxic air contaminants

* Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

3.2. JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

The goal of the thresholds is to ensure that no source creates, or receptor endures, a significant adverse impact from any individual project, and that the total of all nearby directly emitted risk and hazard emissions is also not significantly adverse. The thresholds for local risks and hazards from TAC and $PM_{2.5}$ are intended to apply to all sources of emissions, including both permitted stationary sources and on- and off-road mobile sources, such as sources related to construction, busy roadways, or freight movement.

Thresholds for an individual new source are designed to ensure that the source does not contribute to a cumulatively significant impact. Cumulative thresholds for sources recognize that some areas are already near or at levels of significant impact. If within such an area there are receptors, or it can reasonably be foreseen that there will be receptors, then a cumulative significance threshold sets a level beyond which any additional risk is significant.

For new receptors – sensitive populations or the general public – thresholds of significance are designed to identify levels of contributed risk or hazards from existing local sources that pose a significant risk to the receptors. Single-source thresholds for receptors are provided to recognize that within the area defined there can be variations in risk levels that may be significant. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the area defined by the selected radius. Cumulative thresholds for receptors are designed to account for the effects of all sources within the defined area.

Cumulative thresholds, for both sources and receptors, must consider the size of the source area, defined by a radius from the proposed project. To determine cumulative impacts from a prescribed zone of influence requires the use of modeling. The larger the radius, the greater the number of sources considered that may contribute to the modeled risk and, until the radius approaches a regional length scale, the greater the expected modeled risk increment. If the area of impact considered were grown to the scale of a city, the modeled risk increment would approach the risk level present in the ambient air.

3.2.1. Scientific and Regulatory Justification

Regulatory Framework for TACs

Prior to 1990, the Clean Air Act required EPA to list air toxics it deemed hazardous and to establish control standards which would restrict concentrations of hazardous air pollutants (HAP) to a level that would prevent any adverse effects “with an ample margin of safety.” By 1990, EPA had regulated only seven such pollutants and it was widely acknowledged by that time that the original Clean Air Act had failed to address toxic air emissions in any meaningful way. As a result, Congress changed the focus of regulation in 1990 from a risk-based approach to technology-based standards. Title III, Section 112(b) of the 1990 Clean Air Act Amendment established this new regulatory approach. Under this framework, prescribed pollution control technologies based upon maximum achievable control technology (MACT) were installed without the a priori estimation of the health or environmental risk associated with each individual source. The law listed 188 HAPs that would be subject to the MACT standards. EPA issued 53 standards for 89 different types of major industrial sources of air toxics and eight categories of smaller sources such as dry cleaners. These requirements took effect between 1996 and 2002. Under the federal Title V Air Operating Permit Program, a facility with the potential to emit 10 tons of any toxic air pollutant, or 25 tons per year of any combination of toxic air pollutants, is defined as a major source HAPs. Title V permits include requirements for these facilities to limit toxic air pollutant emissions.

Several state and local agencies adopted programs to address gaps in EPA's program prior to the overhaul of the national program in 1990. California's program to reduce exposure to air toxics was established in 1983 by the Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983) and the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly 1987). Under AB 1807, ARB and the Office of Environmental Health Hazard Assessment (OEHHA) determines if a substance should be formally identified as a toxic air contaminant (TAC) in California. OEHHA also establishes associated risk factors and safe concentrations of exposure.

AB 1807 was amended in 1993 by AB 2728, which required ARB to identify the 189 federal hazardous air pollutants as TACs. AB 2588 (Connelly, 1987) supplements the AB 1807 program, by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks. In September 1992, the "Hot Spots" Act was amended by Senate Bill 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

Cancer Risk

Cancer risk from TACs is typically expressed in numbers of excess cancer cases per million persons exposed over a defined period of exposure, for example, over an assumed 70 year lifetime. The Air District is not aware of any agency that has established an acceptable level of cancer risk for TACs. However, a range of what constitutes a significant increment of cancer risk from any compound has been established by the U.S. EPA. EPA's guidance for conducting air toxics analyses and making risk management decisions at the facility- and community-scale level considers a range of acceptable cancer risks from one in a million to one in ten thousand (100 in a million). The guidance considers an acceptable range of cancer risk increments to be from one in a million to one in ten thousand. In protecting public health with an ample margin of safety, EPA strives to provide maximum feasible protection against risks to health from HAPs by limiting additional risk to a level no higher than the one in ten thousand estimated risk that a person living near a source would be exposed to at the maximum pollutant concentrations for 70 years. This goal is described in the preamble to the benzene National Emissions Standards for Hazardous Air Pollutants (NESHAP) rulemaking (54 Federal Register 38044, September 14, 1989) and is incorporated by Congress for EPA's residual risk program under Clean Air Act section 112(f).

Regulation 2, Rule 5 of the Air District specifies permit requirements for new and modified stationary sources of TAC. The Project Risk Requirement (2-5-302.1) states that the Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the project cancer risk exceeds 10.0 in one million.

Hazard Index for Non-cancer Health Effects

Non-cancer health hazards for chronic and acute diseases are expressed in terms of a hazard index (HI), a ratio of TAC concentration to a reference exposure level (REL), below which no adverse health effects are expected, even for sensitive individuals. As such, OEHHA has defined acceptable concentration levels, and also significant concentration increments, for compounds that pose non-cancer health hazards. If the HI for a compound is less than one, non-cancer chronic and acute health impacts have been determined to be less than significant.

State and Federal Ambient Air Quality Standards for $PM_{2.5}$

The Children's Environmental Health Protection Act (Senate Bill 25), passed by the California state legislature in 1999, requires ARB, in consultation with OEHHA, to "review all existing health-based ambient air quality standards to determine whether, based on public health, scientific literature and exposure pattern data, these standards adequately protect the public, including infants and children, with an adequate margin of safety." As a result of the review requirement, in 2002 ARB adopted an annual average California Ambient Air Quality Standard (CAAQS) for

$PM_{2.5}$ of 12 ug/m^3 that is not to be exceeded (California Code of Regulations, Title 17 § 70200, Table of Standards). The National Ambient Air Quality Standard (NAAQS) established an annual standard for $PM_{2.5}$ (15 ug/m^3) that is less stringent that the CAAQS, but also set a 24-hour average standard (35 ug/m^3), which is not included in the CAAQS (Code of Federal Regulations, Title 40, Part 50.7).

Significant Impact Levels for $PM_{2.5}$

EPA recently proposed and documented alternative options for $PM_{2.5}$ Significant Impact Levels (SILs) (Federal Register 40 CFR Parts 51 and 52, September 21, 2007). The EPA is proposing to facilitate implementation of a $PM_{2.5}$ Prevention of Significant Deterioration (PSD) program in areas attaining the $PM_{2.5}$ NAAQS by developing $PM_{2.5}$ increments, or SILs. These "increments" are maximum increases in ambient $PM_{2.5}$ concentrations ($PM_{2.5}$ increments) allowed in an area above the baseline concentration.

The SIL is a threshold that would be applied to individual facilities that apply for a permit to emit a regulated pollutant in an area that meets the NAAQS. The State and EPA must determine if emissions from that facility will cause the air quality to worsen. If an individual facility projects an increase in emissions that result in ambient impacts greater than the established SIL, the permit applicant would be required to perform additional analyses to determine if those impacts will be more than the amount of the PSD increment. This analysis would combine the impact of the proposed facility when added to all other sources in the area.

The EPA is proposing such values for $PM_{2.5}$ that will be used as screening tools by a major source subject to PSD to determine the subsequent level of analysis and data gathering required for a PSD permit application for emissions of $PM_{2.5}$. The SIL is one element of the EPA program to prevent deterioration in regional air quality and is utilized in the new source review (NSR) process. New source review is required under Section 165 of the Clean Air Act, whereby a permit applicant must demonstrate that emissions from the proposed construction and operation of a facility "will not cause, or contribute to, air pollution in excess of any maximum allowable increase or maximum allowable concentration for any pollutant." The purpose of the SIL is to provide a screening level that triggers further analysis in the permit application process.

For the purpose of NSR, SILs are set for three types of areas: Class I areas where especially clean air is most desirable, including national parks and wilderness areas; Class II areas where there is not expected to be substantial industrial growth; and Class III areas where the highest relative level of industrial development is expected. In Class II and Class III areas, a $PM_{2.5}$ concentration of 0.3, 0.8, and 1 µg/m^3 has been proposed as a SIL. To arrive at the SIL $PM_{2.5}$ option of 0.8 µg/m^3 , EPA scaled an established PM_{10} SILs of 1.0 µg/m^3 by the ratio of emissions of $PM_{2.5}$ to PM_{10} using the EPA's 1999 National Emissions Inventory. To arrive at the SIL option of 0.3 µg/m^3, EPA scaled the PM_{10} SIL of 1.0 µg/m^3 by the ratio of the current Federal ambient air quality standards for $PM_{2.5}$ and PM_{10} (15/50). These options represent what EPA currently considers as a range of appropriate SIL values.

EPA interprets the SIL to be the level of $PM_{2.5}$ increment that represents a "significant contribution" to regional non-attainment. While SIL options were not designed to be thresholds for assessing community risk and hazards, they are being considered to protect public health at a regional level by helping an area maintain the NAAQS. Furthermore, since it is the goal of the Air District to achieve and maintain the NAAQS and CAAQS at both regional and local scales, the SILs may be reasonably be considered as thresholds of significance under CEQA for local-scale increments of $PM_{2.5}$.

Roadway Proximity Health Studies

Several medical research studies have linked near-road pollution exposure to a variety of adverse health outcomes impacting children and adults. Kleinman et al. (2007) studied the potential of roadway particles to aggravate allergic and immune responses in mice. Using mice that were not inherently susceptible, the researchers placed these mice at various distances downwind of State Road 60 and Interstate 5 freeways in Los Angeles to test the effect these roadway particles have on their immune system. They found that within five meters of the roadway, there was a significant allergic response and elevated production of specific antibodies. At 150 meters (492 feet) and 500 meters (1,640 feet) downwind of the roadway, these effects were not statistically significant.

Another significant study (Ven Hee et al. 2009) conducted a survey involving 3,827 participants that aimed to determine the effect of residential traffic exposure on two preclinical indicators of heart failure; left ventricular mass index (LVMI), measured by the cardiac magnetic resonance imaging (MRI), and ejection fraction. The studies classified participants based on the distance between their residence and the nearest interstate highway, state or local highway, or major arterial road. Four distance groups were defined: less than 50 meters (165 feet), 50-100 meters, 101-150 meters, and greater than 150 meters. After adjusting for demographics, behavioral, and clinical covariates, the study found that living within 50 meters of a major roadway was associated with a 1.4 g/m^2 higher LVMI than living more than 150 meters from one. This suggests an association between traffic-related air pollution and increased prevalence of a preclinical predictor of heart failure among people living near roadways.

To quantify the roadway concentrations of $PM_{2.5}$ that contributed to the health impacts reported by Kleinman et al (2007), the Air District modeled the emissions and associated particulate matter concentrations for the roadways studied. To perform the modeling, emissions were estimated for Los Angeles using the EMFAC model and annual average vehicle traffic data taken from Caltrans was used in the roadway model (CAL3QHCR) to estimate the downwind $PM_{2.5}$ concentrations at 50 meters and 150 meters. Additionally, emissions were assumed to occur from 10:00 a.m. to 2:00 p.m. corresponding to the time in which the mice were exposed during the study. The results of the modeling indicate that at 150 meters, where no significant health effects were found, the downwind concentration of $PM_{2.5}$ was 0.78 $\mu g/m^3$, consistent with the proposed EPA SIL option of 0.8 $\mu g/m^3$.

Concentration-Response Function for $PM_{2.5}$

The U.S. EPA reevaluated the relative risk of premature death associated with $PM_{2.5}$ exposure and developed a new relative risk factor (U.S. EPA 2006). This expert elicitation was prepared in support of the characterization of uncertainty in EPA's benefits analyses associated with reductions in exposure to particulate matter pollution. As recommended by the National Academy of Sciences, EPA used expert judgment to better describe the uncertainties inherent in their benefits analysis. Twelve experts participated in the study and provided not just a point estimate of the health effects of PM2.5, but a probability distribution representing the range where they expected the true effect would be. Among the experts who directly incorporated their views on the likelihood of a causal relationship into their distributions, the central (median) estimates of the percent change in all-cause mortality in the adult U.S. population that would result from a permanent 1 µg/m3 drop in annual average PM2.5 concentrations ranged from 0.7 to 1.6 percent. The median of their estimates was 1.0 (% increase per 1 µg/m3 increase in PM2.5), with a 90% confidence interval of 0.3 to 2.0 (medians of their 5th and 95th percentiles, respectively) (BAAQMD 2010).Subsequent to the EPA elicitation, Schwartz et al. (2008) examined the linearity of the concentration-response function of $PM_{2.5}$-mortality and showed that the response function was linear, with health effects clearly continuing below the current U.S. standard of 15 $\mu g/m^3$, and that the effects of changes in exposure on mortality were seen within two years.

San Francisco Ordinance on Roadway Proximity Health Effects

In 2008, the City and County of San Francisco adopted an ordinance (San Francisco Health Code, Article 38 - Air Quality Assessment and Ventilation Requirement for Urban Infill Residential Development, Ord. 281-08, File No. 080934, December 5, 2008) requiring that public agencies in San Francisco take regulatory action to prevent future air quality health impacts from new sensitive uses proposed near busy roadways (SFDPH 2008). The regulation requires that developers screen sensitive use projects for proximity to traffic and calculate the concentration of $PM_{2.5}$ from traffic sources where traffic volumes suggest a potential hazard. If modeled levels of traffic-attributable $PM_{2.5}$ at a project site exceed an action level (currently set at 0.2 µg/m^3) developers would be required to incorporate ventilation systems to remove 80 percent of $PM_{2.5}$ from outdoor air. The regulation does not place any requirements on proposed sensitive uses if modeled air pollutant levels fall below the action threshold. This ordinance only considers impacts from on-road motor vehicles, not impacts related to construction equipment or stationary sources.

A report with supporting documentation for the ordinance (SFPHD 2008) provided a threshold to trigger action or mitigation of 0.2 µg/m^3 of $PM_{2.5}$ annual average exposure from roadway vehicles within a 150 meter (492 feet) maximum radius of a sensitive receptor. The report applied the concentration-response function from Jerrett et al. (2005) that attributed 14 percent increase in mortality to a 10 µg/m^3 increase in $PM_{2.5}$ to estimate an increase in non-injury mortality in San Francisco of about 21 excess deaths per million population per year from a 0.2 µg/m^3 increment of annual average $PM_{2.5}$.

Distance for Significant Impact

The distance used for the radius around the project boundary should reflect the zone or area over which sources may have a significant influence. For cumulative thresholds, for both sources and receptors, this distance also determines the size of the source area, defined. To determine cumulative impacts from a prescribed zone of influence requires the use of modeling. The larger the radius, the greater the number of sources considered that may contribute to the risk and the greater the expected modeled risk increment. If the area of impact considered were grown to approach the scale of a city, the modeled risk increment would approach the risk level present in the ambient air.

A summary of research findings in ARB's Land Use Compatibility Handbook (ARB 2005) indicates that traffic-related pollutants were higher than regional levels within approximately 1,000 feet downwind and that differences in health-related effects (such as asthma, bronchitis, reduced lung function, and increased medical visits) could be attributed in part to the proximity to heavy vehicle and truck traffic within 300 to 1,000 feet of receptors. In the same summary report, ARB recommended avoiding siting sensitive land uses within 1,000 feet of a distribution center and major rail yard, which supports the use of a 1,000 feet evaluation distance in case such sources may be relevant to a particular project setting. A 1,000 foot zone of influence is also supported by Health & Safety Code §42301.6 (Notice for Possible Source Near School).

Some studies have shown that the concentrations of particulate matter tend to be reduced substantially or can even be indistinguishable from upwind background concentrations at a distance 1,000 feet downwind from sources such as freeways or large distribution centers. Zhu et al. (2002) conducted a systematic ultrafine particle study near Interstate 710, one of the busiest freeways in the Los Angeles Basin. Particle number concentration and size distribution were measured as a function of distances upwind and downwind of the I-710 freeway. Approximately 25 percent of the 12,180 vehicles per hour are heavy duty diesel trucks based on video counts conducted as part of the research. Measurements were taken at 13 feet, 23 feet, 55 feet, 252 feet, 449 feet, and 941 feet downwind and 613 feet upwind from the edge of the freeway. The particle number and supporting measurements of carbon monoxide and black carbon decreased

exponentially and all constituents simultaneously tracked with each other as one moves away from the freeway. Ultrafine particle size distribution changed markedly and its number concentrations dropped dramatically with increasing distance. The study found that ultrafine particle concentrations measured 941 feet downwind of I-710 were indistinguishable from the upwind background concentration.

Impacted Communities

Starting in 2006, the Air District's CARE program developed gridded TAC emissions inventories and compiled demographic information that were used to identify communities that were particularly impacted by toxic air pollution for the purposes of distributing grant and incentive funding. In 2009, the District completed regional modeling of TAC on a one kilometer by one kilometer grid system. This modeling was used to estimate cancer risk and TAC population exposures for the entire District. The information derived from the modeling was then used to update and refine the identification of impacted communities. One kilometer modeling yielded estimates of annual concentrations of five key compounds – diesel particulate matter, benzene, 1,3-butadiene, formaldehyde, and acetaldehyde – for year 2005. These concentrations were multiplied by their respective unit cancer risk factors, as established by OEHHA, to estimate the expected excess cancer risk per million people from these compounds.

Sensitive populations from the 2000 U.S. Census database were identified as youth (under 18) and seniors (over 64) and mapped to the same one kilometer grid used for the toxics modeling. Excess cancers from TAC exposure were determined by multiplying these sensitive populations by the model-estimated excess risk to establish a data set representing sensitive populations with high TAC exposures. TAC emissions (year 2005) were mapped to the one kilometer grid and also scaled by their unit cancer risk factor to provide a data set representing source regions for TAC emissions. Block-group level household income data from the U.S. Census database were used to identify block groups with family incomes where more than 40 percent of the population was below 185 percent of the federal poverty level (FPL). Poverty-level polygons that intersect high (top 50 percent) exposure cells and are within one grid cell of a high emissions cell (top 25 percent) were used to identify impacted areas. Boundaries were constructed along major roads or highways that encompass nearby high emission cells and low income areas. This method identified the following six areas as priority communities: (1) portions of the City of Concord; (2) Western Contra Costa County (including portions of the Cities of Richmond and San Pablo); (3) Western Alameda County along the Interstate-880 corridor (including portions of the Cities of Berkeley, Oakland, San Leandro, San Lorenzo, Hayward; (4) Portions of the City of San Jose. (5) Eastern San Mateo County (including portions of the Cities of Redwood City and East Palo Alto); and (6) Eastern portions of the City of San Francisco.

3.2.2. Construction, Land Use and Stationary Source Risk and Hazard Thresholds

The options for local risk and hazards thresholds of significance are based on U.S. EPA guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. The thresholds consider reviews of recent health effects studies that link increased concentrations of fine particulate matter to increased mortality. The thresholds would apply to both siting new sources and siting new receptors.

For new sources of TACs, thresholds of significance for a single source are designed to ensure that emissions do not raise the risk of cancer or non-cancer health impacts to cumulatively significant levels. For new sources of $PM_{2.5}$, thresholds are designed to ensure that $PM_{2.5}$ concentrations are maintained below state and federal standards in all areas where sensitive receptors or members of the general public live or may foreseeably live, even if at the local- or community-scale where sources of TACs and PM may be nearby.

Project Radius for Assessing Impacts

For a project proposing a new source or receptor it is recommended to assess impacts within 1,000 feet, taking into account both its individual and nearby cumulative sources (i.e. proposed project plus existing and foreseeable future projects). Cumulative sources are the combined total risk values of each individual source within the 1,000-foot evaluation zone. A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius.

The 1,000 foot radius is consistent with findings in ARB's Land Use Compatibility Handbook (ARB 2005), the Health & Safety Code §42301.6 (Notice for Possible Source Near School), and studies such as that of Zhu et al (2002) which found that concentrations of particulate matter tend to be reduced substantially at a distance 1,000 feet downwind from sources such as freeways or large distribution centers.

Qualified Community Risk Reduction Plan

Within the framework of these thresholds, proposed projects would be considered to be less than significant if they are consistent with a qualified Community Risk Reduction Plan (CRRP) adopted by the local jurisdiction with enforceable measures to reduce the community risk.

Project proposed in areas where a CRRP has been adopted that are not consistent with the CRRP would be considered to have a significant impact.

Projects proposed in areas where a CRRP has not been adopted and that have the potential to expose sensitive receptors or the general public to emissions-related risk in excess of the thresholds below from any source would be considered to have a significant air quality impact.

The conclusion that land use projects that comply with qualified Community Risk Reduction Plans are less than significant is supported by CEQA Guidelines Sections 15030(a)(3) and 15064(h)(3), which provides that a project's contribution to a cumulative problem can be less that cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

Increased Cancer Risk to Maximally Exposed Individual (MEI)

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of carcinogenic TACs from any source result in an increased cancer risk greater than 10.0 in one million, assuming a 70 year lifetime exposure. Under Board Option 1, within Impacted Communities as defined through the CARE program, the significance level for cancer would be reduced to 5.0 in one million for new sources.

The 10.0 in one million cancer risk threshold for a single source is supported by EPA's guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. It is also the level set by the Project Risk Requirement in the Air District's Regulation 2, Rule 5 new and modified stationary sources of TAC, which states that the Air Pollution Control Officer shall deny an Authority to Construct or Permit to Operate for any new or modified source of TACs if the project risk exceeds a cancer risk of 10.0 in one million.

This threshold for an individual new source is designed to ensure that the source does not contribute a cumulatively significant impact. The justification for the Tiered Thresholds Option threshold of 5.0 in one million for new sources in an impacted community is that in these areas the cancer risk burden is higher than in other parts of the Bay Area; the threshold at which an individual source becomes significant is lower for an area that is already at or near unhealthy levels. However, even without a tiered approach, the recommended thresholds already address the burden of impacted communities via the cumulative thresholds: specifically, if an area has

many existing TAC sources near receptors, then the cumulative threshold will be reached sooner than it would in another area with fewer TAC sources.

The single-source threshold for receptors is provided to address the possibility that within the area defined by the 1,000 foot radius there can be variations in risk levels that may be significant, below the corresponding cumulative threshold. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the 1,000 foot radius.

Increased Non-Cancer Risk to MEI

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of non-carcinogenic TACs result in an increased chronic or acute Hazard Index (HI) from any source greater than 1.0. This threshold is unchanged under Tiered Thresholds Option.

A HI less than 1.0 represents a TAC concentration, as determined by OEHHA that is at a health protective level. While some TACs pose non-carcinogenic, chronic and acute health hazards, if the TAC concentrations result in a HI less than one, those concentrations have been determined to be less than significant.

Increased Ambient Concentration of $PM_{2.5}$

Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of $PM_{2.5}$ from any source would result in an average annual increase greater than 0.3 µg/m^3. Under Tiered Thresholds Option, within Impacted Communities as defined through the CARE program, the significance level for a $PM_{2.5}$ increment is 0.2 µg/m^3.

If one applies the concentration-response of the median of the EPA consensus review (EPA 2005, BAAQMD 2010) and attributes a 1 percent increase in mortality to a 1 µg/m^3 increase in $PM_{2.5}$, one finds an increase in non-injury mortality in the Bay Area of about 20 excess deaths per million per year from a 0.3 µg/m^3 increment of $PM_{2.5}$. This is consistent with the impacts reported and considered significant by SFDPH (2008) using an earlier study (Jerrett et al. 2005) to estimate the increase in mortality from a 0.2 µg/m^3 $PM_{2.5}$ increment.

The SFDPH recommended a lower threshold of significance for multiple sources but only considered roadway emissions within a 492 foot radius. This recommendation applies to a single source but considers all types of emissions within 1,000 feet. On balance, the Air District estimates that the SFDPH threshold and this one, in combination with the cumulative threshold for $PM_{2.5}$, will afford similar levels of health protection.

The $PM_{2.5}$ threshold represents the lower range of an EPA proposed Significant Impact Level (SIL). EPA interprets the SIL to be the level of ambient impact that is considered to represent a "significant contribution" to regional non-attainment. While this threshold was not designed to be a threshold for assessing community risk and hazards, it was designed to protect public health at a regional level by helping an area maintain the NAAQS. Since achieving and maintaining state and federal AAQS is a reasonable goal at the local scale, the SIL provides a useful reference for comparison.

This threshold for an individual new source is designed to ensure that the source does not contribute a cumulatively significant impact. The justification for the Tiered Thresholds Option threshold of 0.2 µg/m^3 for new sources in an impacted community is that these areas have higher levels of diesel particulate matter than do other parts of the Bay Area; the threshold at which an individual source becomes significant is lower for an area that is already at or near unhealthy

levels. However, even without a tiered approach, the recommended thresholds already address the burden of impacted communities via the cumulative thresholds: specifically, if an area has many existing $PM_{2.5}$ sources near receptors, then the cumulative threshold will be reached sooner than it would in another area with fewer $PM_{2.5}$ sources.

The single-source threshold for receptors is provided to address the possibility that within the area defined by the 1,000 foot radius there can be variations in risk levels that may be significant, below the corresponding cumulative threshold. Single-source thresholds assist in the identification of significant risks, hazards, or concentrations in a subarea, within the 1,000 foot radius.

Accidental Release of Acutely Hazardous Air Emissions

The BAAQMD currently recommends, at a minimum, that the lead agency, in consultation with the administering agency of the Risk Management Prevention Program (RMPP), find that any project resulting in receptors being within the Emergency Response Planning Guidelines (ERPG) exposure level 2 for a facility has a significant air quality impact. ERPG exposure level 2 is defined as "the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action."

Staff proposes continuing with the current threshold for the accidental release of hazardous air pollutants. Staff recommends that agencies consult with the California Emergency Management Agency for the most recent guidelines and regulations for the storage of hazardous materials. Staff proposes that projects using or storing acutely hazardous materials locating near existing receptors, and projects resulting in receptors locating near facilities using or storing acutely hazardous materials be considered significant.

The current Accidental Release/Hazardous Air Emissions threshold of significance could affect all projects, regardless of size, and require mitigation for Accidental Release/Hazardous Air Emissions impacts.

3.2.3. Cumulative Risk and Hazard Thresholds

Qualified Community Risk Reduction Plan

Proposed projects would be considered to be less than significant if they are consistent with a qualified Community Risk Reduction Plan (CRRP) adopted by the local jurisdiction with enforceable measures to reduce the community risk.

Project proposed in areas where a CRRP has been adopted that are not consistent with the CRRP would be considered to have a significant impact.

Projects proposed in areas where a CRRP has not been adopted and that have the potential to expose sensitive receptors or the general public to emissions-related risk in excess of the following thresholds from the aggregate of cumulative sources would be considered to have a significant air quality impact.

The conclusion that land use projects that comply with qualified Community Risk Reduction Plans are less than significant is supported by CEQA Guidelines Sections 15030(a)(3) and 15064(h)(3), which provides that a project's contribution to a cumulative problem can be less that cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

Increased Cancer Risk to Maximally Exposed Individual (MEI)
Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of carcinogenic TACs from any source result in an increased cancer risk greater than 100.0 in one million.

The significance threshold of 100 in a million increased excess cancer risk would be applied to the cumulative emissions. The 100 in a million threshold is based on EPA guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level. In protecting public health with an ample margin of safety, EPA strives to provide maximum feasible protection against risks to health from hazardous air pollutants (HAPs) by limiting risk to a level no higher than the one in ten thousand (100 in a million) estimated risk that a person living near a source would be exposed to at the maximum pollutant concentrations for 70 years (NESHAP 54 Federal Register 38044, September 14, 1989; CAA section 112(f)). One hundred in a million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on the District's recent regional modeling analysis.

Increased Non-Cancer Risk to MEI
Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of non-carcinogenic TACs result in an increased chronic Hazard Index from any source greater than 10.0.

The Air District has developed an Air Toxics Hot Spots (ATHS) program that provides guidance for implementing the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly, 1987: chaptered in the California Health and Safety Code § 44300, et. al.). The ATHS provides that if the health risks resulting from the facility's emissions exceed significance levels established by the air district, the facility is required to conduct an airborne toxic risk reduction audit and develop a plan to implement measures that will reduce emissions from the facility to a level below the significance level. The Air District has established a non-cancer Hazard Index of ten (10.0) as ATHS mandatory risk reduction levels. The cumulative chronic non-cancer Hazard Index threshold is consistent with the Air District's ATHS program.

Increased Ambient Concentration of $PM_{2.5}$
Emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of $PM_{2.5}$ from any source would result in an average annual increase greater than 0.8 $\mu g/m^3$.

If one applies the concentration-response function from the U.S, EPA assessment (U.S. EPA 2006) and attributes a 10 percent increase in mortality to a 10 $\mu g/m^3$ increase in $PM_{2.5}$, one finds an increase in non-injury mortality in the Bay Area of about 50 excess deaths per year from a 0.8 $\mu g/m^3$ increment of $PM_{2.5}$. This is greater than the impacts reported and considered significant by SFDPH (2008) using an earlier study (Jerrett et al. 2005) to estimate the increase in mortality from a 0.2 $\mu g/m^3$ $PM_{2.5}$ increment (SFDPH reported 21 excess deaths per year). However, SFDPH only considered roadway emissions within a 492 foot radius. This threshold applies to all types of emissions within 1,000 feet. In modeling applications for proposed projects, a larger radius results in a greater number of sources considered and higher modeled concentrations. On balance, the Air District estimates that the SFDPH threshold and this one, in combination with the individual source threshold for $PM_{2.5}$, will afford similar levels of health protection.

The cumulative $PM_{2.5}$ threshold represents the middle range of an EPA proposed Significant Impact Level (SIL). EPA interprets the SIL to be the level of ambient impact that is considered to represent a "significant contribution" to regional non-attainment. While this threshold was not designed to be a threshold for assessing community risk and hazards, it was designed to protect public health at a regional level by helping an area maintain the NAAQS. Since achieving and

maintaining state and federal AAQS is a reasonable goal at the local scale, the SIL provides a useful reference for comparison. Furthermore, the 0.8 $\mu g/m^3$ threshold is consistent with studies (Kleinman et al 2007) that examined the potential health impacts of roadway particles.

3.2.4. Plan-Level Risk and Hazard Thresholds

Staff proposes plan-level thresholds that will encourage a programmatic approach to addressing the overall adverse conditions resulting from risks and hazards that many Bay Area communities experience. By designating overlay zones in land use plans, local land use jurisdictions can take preemptive action before project-level review to reduce the potential for significant exposures to risk and hazard emissions. While this will require more up-front work at the general plan level, in the long-run this approach is a more feasible approach consistent with Air District and CARB guidance about siting sources and sensitive receptors that is more effective than project by project consideration of effects that often has more limited mitigation opportunities. This approach would also promote more robust cumulative consideration of effects of both existing and future development for the plan-level CEQA analysis as well as subsequent project-level analysis.

For local plans to have a less-than-significant impact with respect to potential risks and hazards, overlay zones would have to be established around existing and proposed land uses that would emit these air pollutants. Overlay zones to avoid risk impacts should be reflected in local plan policies, land use map(s), and implementing ordinances (e.g., zoning ordinance). The overlay zones around existing and future risk sources would be delineated using the quantitative approaches described above for project-level review and the resultant risk buffers would be included in the General Plan (or the EIR for the General Plan) to assist in site planning. BAAQMD will provide guidance as to the methods used to establish the TAC buffers and what standards to be applied for acceptable exposure level in the updated CEQA Guidelines document. Special overlay zones of at least 500 feet (or an appropriate distance determined by modeling and approved by the Air District) on each side of all freeways and high volume roadways would be included in this threshold.

The threshold of significance for plan impacts could affect all plan adoptions and amendments and require mitigation for a plan's air quality impacts. Where sensitive receptors would be exposed above the acceptable exposure level, the plan impacts would be considered significant and mitigation would be required to be imposed either at the plan level (through policy) or at the project level (through project level requirements).

3.2.5. Community Risk Reduction Plans

The goal of a Community Risk Reduction Plan would be to bring TAC and $PM_{2.5}$ concentrations for the entire community covered by the Plan down to acceptable levels as identified by the local jurisdiction and approved by the Air District. This approach provides local agencies a proactive alternative to addressing communities with high levels of risk on a project-by-project approach. This approach is supported by CEQA Guidelines Section 15030(a)(3), which provides that a project's contribution to a cumulative problem can be less than cumulatively considerable "if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact." This approach is also further supported by CEQA Guidelines Section 15064(h)(3), which provides that a project's contribution to a cumulative effect is not considerable "if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem."

Qualified Community Risk Reduction Plans

(A) A qualified Community Risk Reduction Plan adopted by a local jurisdiction should include, at a minimum, the following elements. BAAQMD's revised CEQA Guidelines provides the methodology to determine if a Community Risk Reduction Plan meets these requirements. Define a planning area;

(B) Include base year and future year emissions inventories of TACs and PM2.5;

(C) Include Air District–approved risk modeling of current and future risks;

(D) Establish risk and exposure reduction goals and targets for the community in consultation with Air District staff;

(E) Identify feasible, quantifiable, and verifiable measures to reduce emissions and exposures;

(F) Include procedures for monitoring and updating the inventory, modeling and reduction measures in coordination with Air District staff;

(G) Be adopted in a public process following environmental review.

4. CRITERIA POLLUTANT THRESHOLDS

4.1. THRESHOLDS OF SIGNIFICANCE

Project Construction	
Pollutant	**Average Daily (pounds/day)**
ROG (reactive organic gases)	54
NO_X (nitrogen oxides)	54
PM_{10} (exhaust) (particulate matter-10 microns)	82
$PM_{2.5}$ (exhaust) (particulate matter-2.5 microns)	54
$PM_{10}/PM_{2.5}$ (fugitive dust)	Best Management Practices
Local CO (carbon monoxide)	None

Project Operations		
Pollutant	**Average Daily (pounds/day)**	**Maximum Annual (tons/year)**
ROG	54	10
NO_X	54	10
PM_{10}	82	15
$PM_{2.5}$	54	10
Local CO	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	

Plans
1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase

Regional Plans (Transportation and Air Quality Plans)
No net increase in emissions of criteria air pollutants and precursors

4.2. JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

4.2.1. Project Construction Criteria Pollutant Thresholds

Staff proposes criteria pollutant construction thresholds that add significance criteria for exhaust emissions to the existing fugitive dust criteria employed by the Air District. While our current Guidelines considered construction exhaust emissions controlled by the overall air quality plan, the implementation of new and more stringent state and federal standards over the past ten years now warrants additional control of this source of emissions.

The average daily criteria air pollutant and precursor emission levels shown above are recommended as the thresholds of significance for construction activity for exhaust emissions. These thresholds represent the levels above which a project's individual emissions would result in a considerable contribution (i.e., significant) to the SFBAAB's existing non-attainment air quality

conditions and thus establish a nexus to regional air quality impacts that satisfies CEQA requirements for evidence-based determinations of significant impacts.

For fugitive dust emissions, staff recommends following the current best management practices approach which has been a pragmatic and effective approach to the control of fugitive dust emissions. Studies have demonstrated (Western Regional Air Partnership, U.S.EPA) that the application of best management practices at construction sites have significantly controlled fugitive dust emissions. Individual measures have been shown to reduce fugitive dust by anywhere from 30 percent to more than 90 percent. In the aggregate best management practices will substantially reduce fugitive dust emissions from construction sites. These studies support staff's recommendation that projects implementing construction best management practices will reduce fugitive dust emissions to a less than significant level.

4.2.2. Project Operation Criteria Pollutant Thresholds

The thresholds for project operations are the average daily and maximum annual criteria air pollutant and precursor levels shown above. These thresholds are based on the federal BAAQMD Offset Requirements to ozone precursors for which the SFBAAB is designated as a non-attainment area which is an appropriate approach to prevent further deterioration of ambient air quality and thus has nexus and proportionality to prevention of a regionally cumulative significant impact (e.g. worsened status of non-attainment). Despite non-attainment area for state PM_{10} and pending nonattainment for federal $PM_{2.5}$, the federal NSR Significant Emission Rate annual limits of 15 and 10 tons per year, respectively, are the thresholds as BAAQMD has not established an Offset Requirement limit for $PM_{2.5}$ and the existing limit of 100 tons per year is much less stringent and would not be appropriate in light of our pending nonattainment designation for the federal 24-hour $PM_{2.5}$ standard. These thresholds represent the emission levels above which a project's individual emissions would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. The thresholds would be an evaluation of the incremental contribution of a project to a significant cumulative impact. These threshold levels are well-established in terms of existing regulations as promoting review of emissions sources to prevent cumulative deterioration of air quality. Using existing environmental standards in this way to establish CEQA thresholds of significance under Guidelines section 15067.4 is an appropriate and effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other areas of environmental regulation. (*See Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal. App. 4th 98, 111.[6])

4.2.3. Local Carbon Monoxide Thresholds

The carbon monoxide thresholds are based solely on ambient concentration limits set by the California Clean Air Act for Carbon Monoxide and Appendix G of the State of California CEQA Guidelines.

Since the ambient air quality standards are health-based (i.e., protective of public health), there is substantial evidence (i.e., health studies that the standards are based on) in support of their use

[6] The Court of Appeal in the *Communities for a Better Environment* case held that existing regulatory standards could not be used as a definitive determination of whether a project would be significant under CEQA where there is substantial evidence to the contrary. Staff's thresholds would not do that. The thresholds are levels at which a project's emissions would normally be significant, but would not be binding on a lead agency if there is contrary evidence in the record.

as CEQA significance thresholds. The use of the ambient standard would relate directly to the CEQA checklist question. By not using a proxy standard, there would be a definitive bright line about what is or is not a significant impact and that line would be set using a health-based level.

The CAAQS of 20.0 ppm and 9 ppm for 1-hour and 8-hour CO, respectively, would be used as the thresholds of significance for localized concentrations of CO. Carbon monoxide is a directly emitted pollutant with primarily localized adverse effects when concentrations exceed the health based standards established by the California Air Resources Board (ARB).

In addition, Appendix G of the State of California CEQA Guidelines includes the checklist question: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? Answering yes to this question would indicate that the project would result in a significant impact under CEQA. The use of the ambient standard would relate directly to this checklist question.

4.2.4. Plan-Level Criteria Pollutant Thresholds

This threshold achieves the same goals as the Air District's current approach while alleviating the existing analytical difficulties and the inconsistency of comparing a plan update with AQP growth projections that may be up to several years old. Eliminating the analytical inconsistency provides better nexus and proportionality for evaluating air quality impacts for plans.

Over the years staff has received comments on the difficulties inherent in the current approach regarding the consistency tests for population and VMT growth. First, the population growth estimates used in the most recent AQP can be up to several years older than growth estimates used in a recent plan update, creating an inconsistency in this analysis. Staff recommends that this test of consistency be eliminated because the Air District and local jurisdictions all use regional population growth estimates that are disaggregated to local cities and counties. In addition, the impact to air quality is not necessarily growth but where that growth is located. The second test, rate of increase in vehicle use compared to growth rate, will determine if planned growth will impact air quality. Compact infill development inherently has less vehicle travel and more transit opportunities than suburban sprawl.

Second, the consistency test of comparing the rate of increase in VMT to the rate of increase in population has been problematic at times for practitioners because VMT is not always available with the project analysis. Staff recommends that either the rate of increase in VMT or vehicle trips be compared to the rate of increase in population. Staff also recommends that the growth estimates used in this analysis be for the years covered by the plan. Staff also recommends that the growth estimates be obtained from the Association of Bay Area Governments since the Air District uses ABAG growth estimates for air quality planning purposes.

4.2.5. Criteria Pollutant Thresholds for Regional Plans

Regional plans include the Regional Transportation Plan prepared by the Metropolitan Transportation Commission (MTC) and air quality plans prepared by the Air District.

The Regional Transportation Plan (RTP), also called a Metropolitan Transportation Plan (MTP) or Long-Range Transportation Plan is the mechanism used in California by both Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs) to conduct long-range (minimum of 20 years) planning in their regions. MTC functions as both the regional transportation planning agency, a state designation, and, for federal purposes, as the region's metropolitan planning organization (MPO). As such, it is responsible for regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of

comprehensive transportation system that includes mass transit, highway, airport, seaport, railroad, bicycle and pedestrian facilities. The performance of this system affects such public policy concerns as air quality, environmental resource consumption, social equity, "smart growth," economic development, safety, and security. Transportation planning recognizes the critical links between transportation and other societal goals. The planning process requires developing strategies for operating, managing, maintaining, and financing the area's transportation system in such a way as to advance the area's long-term goals.

The Air District periodically prepares and updates plans to achieve the goal of healthy air. Typically, a plan will analyze emissions inventories (estimates of current and future emissions from industry, motor vehicles, and other sources) and combine that information with air monitoring data (used to assess progress in improving air quality) and computer modeling simulations to test future strategies to reduce emissions in order to achieve air quality standards. Air quality plans usually include measures to reduce air pollutant emissions from industrial facilities, commercial processes, motor vehicles, and other sources. Bay Area air quality plans are prepared with the cooperation of MTC and the Association of Bay Area Governments (ABAG).

The threshold of significance for regional plans is no net increase in emissions including criteria pollutant emissions. This threshold serves to answer the State CEQA Guidelines Appendix G sample question: "Would the project Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?"

5. ODOR THRESHOLDS

5.1. THRESHOLDS OF SIGNIFICANCE

Project Operations – Source or Receptor	Plans
Five confirmed complaints per year averaged over three years	Identify the location, and include policies to reduce the impacts, of existing or planned sources of odors

5.2. JUSTIFICATION AND SUBSTANTIAL EVIDENCE SUPPORTING THRESHOLDS

Staff proposes revising the current CEQA significance threshold for odors to be consistent with the Air District's regulation governing odor nuisances (Regulation 7—Odorous Substances). The current approach includes assessing the number of unconfirmed complaints which are not considered indicative of actual odor impacts. Basing the threshold on an average of five confirmed complaints per year over a three year period reflects the most stringent standards derived from the Air District rule and is considered an appropriate approach to a CEQA evaluation of odor impacts.

Odors are generally considered a nuisance, but can result in a public health concern. Some land uses that are needed to provide services to the population of an area can result in offensive odors, such as filling portable propane tanks or recycling center operations. When a proposed project includes the siting of sensitive receptors in proximity to an existing odor source, or when siting a new source of potential odors, the following qualitative evaluation should be performed.

When determining whether potential for odor impacts exists, it is recommended that Lead Agencies consider the following factors and make a determination based on evidence in each qualitative analysis category:

Distance: Use the screening-level distances in Table 9.

Wind Direction: Consider whether sensitive receptors are located upwind or downwind from the source for the most of the year. If odor occurrences associated with the source are seasonal in nature, consider whether sensitive receptors are located downwind during the season in which odor emissions occur.

Complaint History: Consider whether there is a history of complaints associated with the source. If there is no complaint history associated with a particular source (perhaps because sensitive receptors do not already exist in proximity to the source), consider complaint-history associated with other similar sources in BAAQMD's jurisdiction with potential to emit the same or similar types of odorous chemicals or compounds, or that accommodate similar types of processes.

Character of Source: Consider the character of the odor source, for example, the type of odor events according to duration of exposure or averaging time (e.g., continuous release, frequent release events, or infrequent events).

Exposure: Consider whether the project would result in the exposure of a substantial number of people to odorous emissions.

Table 9 – Screening Distances for Potential Odor Sources

Type of Operation Project Screening	Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Coffee Roaster	1 mile

California Integrated Waste Management Board (CIWMB). Facilities that are regulated by the CIWMB (e.g. landfill, composting, etc.) are required to have Odor Impact Minimization Plans (OIMP) in place and have procedures that establish fence line odor detection thresholds. The Air District recognizes a lead agency's discretion under CEQA to use established odor detection thresholds as thresholds of significance for CEQA review for CIWMB regulated facilities with an adopted OIMP.

REFERENCES

ARB. *See* California Air Resources Board.

BAAQMD. *See* Bay Area Air Quality Management District.

Bay Area Air Quality Management District. 1999 (December). *BAAQMD CEQA Guidelines*. San Francisco, CA.

_____. 2005. Regulation 2, Rule 2. New Source Review. Available: <http://www.baaqmd.gov/dst/regulations/rg0202.pdf>. Accessed February 2009.

_____. 2006. CARE Phase 1 Findings and Policy Recommendations. Available: <http://baaqmd.gov/CARE/documents/care_p1_findings_recommendations_v2.pdf>. Accessed March 2009.

_____. 2008. Source Inventory of Bay Area Greenhouse Gas Emissions. San Francisco, CA.

_____. 2009. *Revised Draft Options and Justifications Report – California Environmental Quality Act Thresholds of Significance* (http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/Revised%20Draft%20CEQA%20Thresholds%20%20Justification%20Report%20Oct%202009.ashx)

_____. 2010. *Draft 2010 CAP Appendix A – Bay Area Air Pollution Burden: Past & Present* San Francisco, CA

California Air Pollution Control Officers Association. 2008 (January). *CEQA and Climate Change*. Sacramento, CA. Available: <http://www.capcoa.org/CEQA/CAPCOA%20White%20Paper.pdf>. Accessed April 10, 2009.

California Air Resources Board. 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. Stationary Source Division. Mobile Source Control Division. October.

_____. 2002. Staff Report: Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates. Available: http://www.arb.ca.gov/research/aaqs/std-rs/pm-final/pm-final.htm.

_____. 2005. *Land Use Compatibility Handbook. A Community Health Perspective.* Sacramento, CA.

_____. 2008a. *Climate Change Proposed Scoping Plan*. Sacramento, CA. Adopted in December 2008Available: <http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm>. Accessed March 2009.

_____. *Climate Change Proposed Scoping Plan*. Sacramento, CA. Adopted in December 2008 Available:

<http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm>. Accessed March 2009.

_____. 2009a. Greenhouse Gas Inventory and Forecast. Available: <http://www.arb.ca.gov/cc/inventory/data/tables/arb_ghg_inventory_forecast_2008_06_26.xls>. Accessed March 2009.

_____. 2009b. *Preliminary Draft Staff Proposal: Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act*. Available: <http://www.arb.ca.gov/cc/localgov/ceqa/meetings/10270prelimdraftproposal102408.pdf>. Accessed March 2009.

_____. 2009c. *Area Designations and Maps*. Available: <http://www.arb.ca.gov/desig/desig.htm>, Accessed April 10.

_____. 2009d. Proposed Regulation to Implement the Low Carbon Fuel Standard, Staff Report Initial Statement Reasons. March 5. Available: http://www.arb.ca.gov/fuels/lcfs/lcfs.htm. Accessed, August 20, 2009.

CEC. *See* California Energy Commission.

CEC. 2007. Impact Analysis 2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings. Available: <http://www.energy.ca.gov/title22008standards/rulemaking/documents/2007-11-07_IMPACT_ANALYSIS.PDF>. Accessed March 2009.

California Department of Finance. 2009. Residential Development Data: E5 – City and County Population Estimates. 2000-2050 - Race and Ethnic Populations Totals. Available: <http://www.labormarketinfo.edd.ca.gov/?pageid=145 >. Accessed February 2009.

California Economic Development Department. 2009. Commercial/Industrial Employment Data: Projections of Employment by Industry and Occupation. Available: <http://www.labormarketinfo.edd.ca.gov/?pageid=145>. Accessed February 2009.

City and County of San Francisco Department of Public Health. 2008. Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review. Program on Health, Equity, & Sustainability. Occupational & Environmental Health Section. Prepared by Rajiv Bhatia and Thomas Rivard. May 6.

Dockery D. 1993. An association between air pollution and mortality in six U.S. cities. N Engl J Med 329:1753–1759.

EPA. *See* U.S. Environmental Protection Agency.

Governor's Office of Planning and Research. 2008 (June 19). *Technical Advisory: CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review.* Sacramento, CA. Available: <http://opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf>. Accessed February 2009.

Hiltermann T, Bruijne Cd, Stolk J, Zwinderman A, Spieksma F, Roemer W, et al. 1997. Effects of photochemical air pollution and allergen exposure on upper respiratory tract inflammation in asthmatics. Am J Respir Crit Care Med 156(6):1765–1772.

Intergovernmental Panel on Climate Change. 2007a (February). *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC.* Geneva, Switzerland.

_____. 2007a (February). *Climate Change 2007: Climate Change 2007:Synthesis Report Summary for Policymakers.* Geneva, Switzerland.

IPCC. *See* Intergovernmental Panel on Climate Change.

Jerrett M et al. 2005. Spatial Analysis of Air Pollution and Mortality in Los Angeles. Epidemiology. 16: 727-736

Kleinman, M.T., Sioutas, C., Froines, J.R., Fanning, E., Hamade, A., Mendez, L., Meacher, D., Oldham, M. Inhalation of Concentrated Ambient Particulate Matter Near a Heavily Trafficked Road Simulates Antigen-Induced Airway Responses in Mice; Inhal. Toxicol. 2007, 19 (Supp. 1), 117-126.

Laden, F.; Schwartz, J.; Speizer, F.E.; Dockery, D.W. Reduction in Fine Particulate Air Pollution and Mortality: Extended Follow-Up of the Harvard Six Cities Study. *Am. J. Respir. Crit. Care Med.* (2006), *173,* 667-672.

OPR. *See* Governor's Office of Planning and Research.

Pope C III, Thun M, Namboordiri M, Dockery D, Evans J, Speizer F. 1995. Particulate air pollution as a predictor of mortality in a prospective study of U.S. adults. Am J Respir Crit Care Med 151(3):669–6

Rimpo and Associates. 2009. BAAQMD CEQA Projects Database. Orangevale, CA.

Schauer JJ, Lough GC, Schafer MM, Christensen WF, Arndt MF, DeMinter JT, et al. 2006. Characterization of metals emitted from motor vehicles. Res Rep Health Eff Inst 133:1–7.

Schikowski T, Sugiri D, Ranft U, Gehring U, Heinrich J, Wichmann E, et al. 2005. Long-term air pollution exposure and living close to busy roads are associated with COPD in women. Respir Res 6(1):152.

Schwartz, J.; Coull, B.; Laden, F.; Ryan, L. The Effect of Dose and Timing of Dose on the Association between Airborne Particles and Survival. Env Health Persp (2008) 116, 1: 64-69.

SFDPH. See City and County of San Francisco Department of Public Health.

UNFCCC. *See* United Nations Framework Convention on Climate Change.

United Nations Framework Convention on Climate Change. 2009. *Article 1 of the UNFCCC.* Available: http://unfccc.int/essential_background/convention/background/items/2536.php. Accessed April 8, 2009.

U.S. Environmental Protection Agency. 2008. Federal Register: Implementation of the New Source Review (NSR) Program for Particulate Matter ($PM_{2.5}$) less than 2.5 Micrometers.

Available: <http://www.epa.gov/fedrgstr/EPA-AIR/200May/Day-1a10768.pdf>. Accessed February 2009.

_____. 2009. Monitor Values Report Data. Available: <http://www.epa.gov/air/data/index.html>. Accessed April 8, 2009.

_____. 2006. *Expanded Expert Judgment Assessment of the Concentration-Response Relationship between $PM_{2.5}$ Exposure and Mortality*, prepared for OAQPS-EPA by Industrial Economics Inc., September 21, 2006. A summary of this study is provided in Roman, HA et al., *Environ. Sci. Tech.* 2008, 42, 2268-2274.

_____. 1988. C. Cowherd, et al., *Control of Open Fugitive Dust Sources*, EPA-450/3-88-008, U. S. Environmental Protection Agency, Research Triangle Park, NC, September 1988.

Van Hee, V.C., Adar, S.D., Szpiro, A.A., Barr, R.G., Bluemke, D.A., Diez Roux, A.V., Gill, E.A., Sheppard, L., Kaufman, J.D. Exposure to Traffic and Left Ventricular Mass and Function; Am. J. Respir. Crit. Care Med. 2009, 179 (9), 827-834.

Vineis P, Hoek G, Krzyzanowski M, Vigna-Taglianti F, Veglia F, Airoldi L, et al. 2007. Lung cancers attributable to environmental tobacco smoke and air pollution in non-smokers in different European countries: a prospective study. Environ Health 6:7; doi:10.1186/1476-069X-6-7 [Online 15 February 2007]

Western Regional Air Partnership. 2006. *WRAP Fugitive Dust Handbook.* September 7, 2006. Available: http://www.wrapair.org/forums/dejf/fdh/content/FDHandbook_Rev_06.pdf. Accessed September 2009.

Zhu, Y. Hinds, W.C., Kim S, and Sioutas, C. 2002. Concentration and size distribution of ultrafine particles near a major highway. Journal of Air and Waste Management Association. 2002 Sep; 52 (9): 1032-42.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION No. 2010-06

A Resolution of the Board of Directors of the Bay Area Air Quality Management District Adopting Thresholds For Use In Determining the Significance of Projects' Environmental Effects Under the California Environmental Quality Act

WHEREAS, pursuant to Title 14, Chapter 3, Article 5, Section 15064.7 of the California Code of Regulations ("Section 15064.7"), the California Resources Agency encourages public agencies to adopt "Thresholds of Significance" under the California Environmental Quality Act ("CEQA");

WHEREAS, pursuant to Section 15064.7, CEQA Thresholds of Significance are identifiable quantitative, qualitative or performance levels of a particular environmental effect, non-compliance with which means the effect will normally be determined to be "significant" under CEQA, and compliance with which means the effect normally will be determined to be less than significant under CEQA;

WHEREAS, the Board of Directors ("Board") of the Bay Area Air Quality Management District ("District") finds it necessary and appropriate to adopt CEQA Thresholds of Significance as set forth in Attachment A hereto for use by District staff and by other appropriate agencies in determining whether projects may have significant effects on the environment for purposes of CEQA environmental analyses;

WHEREAS, the CEQA Thresholds of Significance as set forth in Attachment A hereto do not alter the existing procedural and substantive requirements of CEQA under California law, but simply clarify the level at which, in the District's considered opinion, an environmental effect should normally be considered "significant" for purposes of existing CEQA law;

WHEREAS, the CEQA Thresholds of Significance set forth in Attachment A hereto were developed through an extensive public review process, which included public workshops, Board meetings and meetings with local government agency and non-government organization staff, including the cities of Berkeley, Colma, Daly City, Dublin, Fremont, Livermore, Oakland, Pleasanton, Richmond, San Leandro, San Mateo, San Francisco and Santa Rosa; the counties of Alameda, Contra Costa, Napa, Santa Clara, and Sonoma; and the CARE Task Force, the Alameda County Planning for Healthy Communities Network and the Governor's Office of Planning and Research Local Government Roundtable;

WHEREAS, District staff held ten public workshops throughout the Bay Area on February 26, 2009, April 27, 29 and 30, 2009, September 8, 9, and 10, 2009, October 2, 2009, and April 15 and 26, 2010; solicited Thresholds of Significance options for consideration; and published for public review and comment the Threshold Options Report on April 24, 2009, the CEQA Thresholds Options and Justification Report on October 8, 2009, and the Proposed Thresholds of Significance Report on November 2, 2009, December 7, 2009 and May 3, 2010;

meetings were held on November 18, 2009, December 2, 2009, January 6, 2010, May 5, 2010 and June 2, 2010;

WHEREAS, at the November 18, 2009, December 2, 2009, January 6, 2010, May 5, 2010 and June 2, 2010 public meetings, the subject matter of the Thresholds of Significance was discussed with interested persons in accordance with all provisions of law;

WHEREAS, the November 18, 2009, December 2, 2009, January 6, 2010, May 5, 2010 and June 2, 2010 public meetings and the other public review opportunities that the District has provided regarding the Thresholds of Significance, constitute a public review process as required by Section 15064.7;

WHEREAS, District staff has prepared and presented to this Board the May 3, 2010, Proposed Thresholds of Significance report, which has been considered by this Board and is incorporated herein by reference;

WHEREAS, the documents and other materials that constitute the record of the public review process under Section 15064.7 on which this Resolution is based are located at the Bay Area Air Quality Management District, 939 Ellis Street, San Francisco, 94109, and the custodian for these documents is Ms. Lisa Harper, Clerk of the Boards;

WHEREAS, District staff recommends adoption of the CEQA Thresholds of Significance set forth in Attachment A hereto;

WHEREAS, the Board of Directors concurs with District staff's recommendations and desires to adopt the CEQA Thresholds of Significance set forth in Attachment A hereto;

NOW, THEREFORE, BE IT RESOLVED that that the Board of Directors of the Bay Area Air Quality Management District does hereby adopt the CEQA Thresholds of Significance, pursuant to the authority granted by law, as set forth in Attachment A hereto, and discussed in the Proposed Thresholds of Significance report dated May 3, 2010, with instructions to staff to correct any typographical or formatting errors before final publication of the CEQA Thresholds of Significance.

BE IT FURTHER RESOLVED that it is the policy of the Bay Area Air Quality Management District that projects that do not comply with the CEQA Thresholds of Significance will normally be determined to have a significant effect on the environment for purposes of CEQA, and projects that comply with the CEQA Thresholds of Significance normally will be determined to have a less-than-significant effect on the environment for purposes of CEQA.

BE IT FURTHER RESOLVED that it is the policy of the Bay Area Air Quality Management District that Lead Agencies in the Bay Area apply the CEQA Thresholds of Significance, except for the Risk and Hazard thresholds for Receptor Projects, for Notices of Preparation issued, and environmental analyses begun, on or after the date of adoption of this Resolution.

BE IT FURTHER RESOLVED that it is the policy of the Bay Area Air Quality Management District that Lead Agencies in the Bay Area apply the CEQA Thresholds of Significance for the

3

Risk and Hazard thresholds for Receptor Projects for Notices of Preparation issued, and environmental analyses begun, after January 1, 2011.

The foregoing Resolution was duly and regularly introduced, passed and adopted at a regular meeting of the Board of Directors of the Bay Area Air Quality Management District on the Motion of Director KALRA, seconded by Director UILKEMA, on the 2nd day of JUNE, 2010, by the following vote of the Board:

AYES: BATES, GARNER, GIOIA, GROOM, HOSTERMAN, HUDSON, KALRA, MAR, ROSS, SPERING, TORLIATT, UILKEMA, YEAGER, WAGENKNECHT

NOES: NONE

RECUSED: HAGGERTY

ABSENT: BROWN, DALY, DUNNIGAN, KLATT, KNISS, MILEY, ZANE

Brad Wagenknecht
Chairperson of the Board of Directors

ATTEST:

John Gioia
Secretary of the Board of Directors

4

ATTACHMENT A

Proposed Air Quality CEQA Thresholds of Significance (May 3, 2010)			
Pollutant	**Construction-Related**	**Operational-Related**	
Project-Level			
Criteria Air Pollutants and Precursors (Regional)	**Average Daily Emissions (lb/day)**	**Average Daily Emissions (lb/day)**	**Maximum Annual Emissions (tpy)**
ROG	54	54	10
NO_X	54	54	10
PM_{10} (exhaust)	82	82	15
$PM_{2.5}$ (exhaust)	54	54	10
$PM_{10}/PM_{2.5}$ (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
GHGs **Projects other than Stationary Sources**	None	Compliance with Qualified Greenhouse Gas Reduction Strategy OR 1,100 MT of CO_2e/yr OR 4.6 MT CO_2e/SP/yr (residents + employees)	
GHGs **Stationary Sources**	None	10,000 MT/yr	
Risks and Hazards – New Source (Individual Project)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 $\mu g/m^3$ annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor	
Risks and Hazards – New Receptor (Individual Project)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of >10.0 in a million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: > 0.3 $\mu g/m^3$ annual average Zone of Influence: 1,000-foot radius from fence line of source or receptor	
Risks and Hazards – New Source (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) $PM_{2.5}$: > 0.8 $\mu g/m^3$ annual average (from all local sources) Zone of Influence: 1,000-foot radius from fence line of source or receptor	

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Proposed Air Quality CEQA Thresholds of Significance (May 3, 2010)		
Pollutant	**Construction-Related**	**Operational-Related**
Risks and Hazards – New Receptor (Cumulative Thresholds)	Same as Operational Thresholds*	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in a million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) $PM_{2.5}$: > 0.8 $\mu g/m^3$ annual average (from all local sources) Zone of Influence: 1,000-foot radius from fence line of source or receptor
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant
Odors	None	Complaint History—5 confirmed complaints per year averaged over three years
Plan-Level		
Criteria Air Pollutants and Precursors	None	1. Consistency with Current Air Quality Plan control measures 2. Projected VMT or vehicle trip increase is less than or equal to projected population increase
GHGs	None	Compliance with Qualified Greenhouse Gas Reduction Strategy (or similar criteria included in a General Plan) OR 6.6 MT CO2e/ SP/yr (residents + employees)
Risks and Hazards	None	1. Overlay zones around existing and planned sources of TACs (including adopted Risk Reduction Plan areas) 2. Overlay zones of at least 500 feet (or Air District-approved modeled distance) from all freeways and high volume roadways
Odors	None	Identify locations of odor sources in general plan
Accidental Release of Acutely Hazardous Air Pollutants	None	None
Regional Plans (Transportation and Air Quality Plans)		
GHGs, Criteria Air Pollutants and Precursors, and Toxic Air Contaminants	None	No net increase in emissions

Notes: CO = carbon monoxide; CO_2e = carbon dioxide equivalent; GHGs = greenhouse gases; lb/day = pounds per day; MT = metric tons; NO_X = oxides of nitrogen; $PM_{2.5}$= fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ppm = parts per million; ROG = reactive organic gases; SP = service population; tpy = tons per year; yr= year.

* Note: The Air District recommends that for construction projects that are less than one year duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year.

E. GLOSSARY

Aerosol -- Particle of solid or liquid matter that can remain suspended in the air because of its small size (generally under one micrometer in diameter).

Air Quality Management District (AQMD) -- Local agency charged with controlling air pollution and attaining air quality standards. The Bay Area Air Quality Management District is the regional AQMD that includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo and Santa Clara Counties and the southern halves of Solano and Sonoma Counties.

Air Resources Board (ARB) -- The State of California agency responsible for air pollution control. Responsibilities include: establishing State ambient air quality standards, setting allowable emission levels for motor vehicles in California and oversight of local air quality management districts.

Area Sources -- Sources of air pollutants that individually emit relatively small quantities of air pollutants, but that may emit considerable quantities of emissions when aggregated over a large area. Examples include water heaters, lawn maintenance equipment, and consumer products.

Best Available Control Technology (BACT) -- The most stringent emissions control that has been achieved in practice, identified in a state implementation plan, or found by the District to be technologically feasible and cost-effective for a given class of sources.

California Clean Air Act (CCAA) -- Legislation enacted in 1988 mandating a planning process to attain state ambient air quality standards.

CALINE -- A model developed by the Air Resources Board that calculates carbon monoxide concentrations resulting from motor vehicle use.

Carbon Monoxide (CO) -- A colorless, odorless, toxic gas produced by the incomplete combustion of carbon-containing substances. It is emitted in large quantities by exhaust of gasoline-powered vehicles.

Carbon Dioxide (CO_2) -- A colorless, odorless gas that is an important contributor to Earth's greenhouse effect.

Carbon Dioxide Equivalent (CO_2E) -- A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

Chlorofluorocarbons (CFCs) -- A family of inert, nontoxic, and easily liquefied chemicals used in refrigeration, air conditioning, packaging, insulation, or as solvents and aerosol propellants. CFCs drift into the upper atmosphere where their chlorine components destroy stratospheric ozone.

Clean Air Act (CAA) -- Long-standing federal legislation, last amended in 1990, that is the legal basis for the national clean air programs.

Conformity -- A requirement in federal law and administrative practice that requires that projects will not be approved if they do not conform with the State Implementation Plan by: causing or contributing to an increase in air pollutant emissions, violating an air pollutant standard, or increasing the frequency of violations of an air pollutant standard.

Criteria Air Pollutants -- Air pollutants for which the federal or State government has established ambient air quality standards, or criteria, for outdoor concentration in order to protect public

health. Criteria pollutants include: ozone, carbon monoxide, sulfur dioxide PM10 (previously total suspended particulate), nitrogen oxide, and lead.

EMFAC -- The computer model developed by the California Air Resources Board to estimate composite on-road motor vehicle emission factors by vehicle class.

Emission Factor -- The amount of a specific pollutant emitted from a specified polluting source per unit quantity of material handled, processed, or burned.

Emission Inventory -- A list of air pollutants emitted over a determined area by type of source. Typically expressed in mass per unit time.

Environmental Protection Agency (EPA) -- The federal agency responsible for control of air and water pollution, toxic substances, solid waste, and cleanup of contaminated sites.

Exceedance -- A monitored level of concentration of any air contaminant higher than national or state ambient air quality standards.

Global Warming Potential (GWP) -- The index used to translate the level of emissions of various gases into a common measure in order to compare the relative radiative forcing of different gases without directly calculating the changes in atmospheric concentrations. GWPs are calculated as the ratio of the radiative forcing that would result from the emissions of one kilogram of a greenhouse gas to that from emission of one kilogram of carbon dioxide over a period of time (usually 100 years).

Greenhouse Gas (GHG) -- Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), halogenated fluorocarbons (HCFCs), ozone (O_3), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6) and hydrofluorocarbons (HFCs).

Hazardous Air Pollutants – Federal terminology for air pollutants which are not covered by ambient air quality standards but may reasonably be expected to cause or contribute to serious illness or death (see NESHAPs).

Health Risk Assessment -- An analysis where human exposure to toxic substances is estimated, and considered together with information regarding the toxic potency of the substances, to provide quantitative estimates of health risk.

Hot Spot -- A location where emissions from specific sources may expose individuals and population groups to elevated risks of adverse health effects and contribute to the cumulative health risks of emissions from other sources in the area.

Hydrogen Sulfide (H_2S) -- A gas characterized by "rotten egg" smell, found in the vicinity of oil refineries, chemical plants and sewage treatment plants.

Impacted Communities – Also known as priority communities, the Air District defines impacted communities within the Bay Area as having higher emitting sources, highest air concentrations, and nearby low income and sensitive populations. The Air District identified the following impacted communities: the urban core areas of Concord, eastern San Francisco, western Alameda County, Redwood City/East Palo Alto, Richmond/San Pablo, and San Jose.

Indirect Sources – Land uses and facilities that attract or generate motor vehicle trips and thus result in air pollutant emissions, e.g., shopping centers, office buildings, and airports.

Inversion -- The phenomenon of a layer of warm air over cooler air below. This atmospheric condition resists the natural dispersion and dilution of air pollutants.

Level of Service (LOS) -- A transportation planning term for a method of measurement of traffic congestion. The LOS compares actual or projected traffic volume to the maximum capacity of the road under study. LOS ranges from A through F. LOS A describes free flow conditions, while LOS F describes the most congested conditions, up to or over the maximum capacity for which the road was designed.

Mobile Source -- Any motor vehicle that produces air pollution, e.g., cars, trucks, motorcycles (on-road mobile sources) or airplanes, trains and construction equipment (off-road mobile sources).

National Ambient Air Quality Standards (NAAQS) -- Health-based pollutant concentration limits established by EPA that apply to outdoor air (see Criteria Air Pollutants).

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) – Emissions standards set by EPA for air pollutants not covered by NAAQS that may cause an increase in deaths or in serious, irreversible, or incapacitating illness.

Nitrogen Oxides (NO_X) -- Gases formed in great part from atmospheric nitrogen and oxygen when combustion takes place under conditions of high temperature and high pressure; NOX is a precursor to the criteria air pollutant ozone.

Nonattainment Area -- Defined geographic area that does not meet one or more of the

Ambient Air Quality Standards for the criteria pollutants designated in the federal Clean Air Act and/or California Clean Air Act.

Ozone (O_3) -- A pungent, colorless, toxic gas. A product of complex photochemical processes, usually in the presence of sunlight. Tropospheric (lower atmosphere) ozone is a criteria air pollutant.

Particulate -- A particle of solid or liquid matter; soot, dust, aerosols, fumes and mists.

Photochemical Process -- The chemical changes brought about by the radiant energy of the sun acting upon various polluting substances. The products are known as photochemical smog.

$PM_{2.5}$ -- Fine particulate matter (solid or liquid) with an aerodynamic diameter equal to or less than 2.5 micrometers. Individual particles of this size are small enough to be inhaled deeply into the lungs..

PM_{10} -- Fine particulate matter (solid or liquid) with an aerodynamic diameter equal to or less than 10 micrometers. Individual particles of this size are small enough to be inhaled into human lungs; they are not visible to the human eye.

Precursor -- Compounds that change chemically or physically after being emitted into the air and eventually produce air pollutants. For example, organic compounds are precursors to ozone.

Prevention of Significant Deterioration (PSD) -- EPA program in which State and/or federal permits are required that are intended to restrict emissions for new or modified sources in places where air quality is already better than required to meet primary and secondary ambient air quality standards.

Reactive Organic Gases (ROG) -- Classes of organic compounds, especially olefins, substituted aromatics and aldehydes, that react rapidly in the atmosphere to form photochemical smog or ozone.

Sensitive Receptors -- Facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals and residential areas.

State Implementation Plan (SIP) -- EPA-approved state plans for attaining and maintaining federal air quality standards.

Stationary Source -- A fixed, non-mobile source of air pollution, usually found at industrial or commercial facilities.

Sulfur Oxides (SO_X) -- Pungent, colorless gases formed primarily by the combustion of sulfur-containing fossil fuels, especially coal and oil. Considered a criteria air pollutant, sulfur oxides may damage the respiratory tract as well as vegetation.

Toxic Air Contaminants -- Air pollutants which cause illness or death in relatively small quantities. Non-criteria air contaminants that, upon exposure, ingestion, inhalation, or assimilation into organisms either directly from the environment or indirectly by ingestion through food chains, may cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, or physical deformations in such organisms or their offspring.

Transportation Control Measures (TCMs) -- Measures to reduce traffic congestion and decrease emissions from motor vehicles by reducing vehicle use.

URBEMIS -- A computer model developed by the California Air Resources Board to estimate air pollutant emissions from motor vehicle trips associated with land use development.

FOR INFORMATIONAL PURPOSES ONLY

Greenhouse Gas Emission Factors: Guidance for PG&E Customers

April 2013

In recent years, an increasing number of PG&E customers have started to track the greenhouse gas (GHG) emissions from their business operations, generated within their city, or saved through energy efficiency. This document is intended to help PG&E customers understand the different emission factors they can use to estimate GHG emissions for their own climate action planning or voluntary GHG emissions tracking or reporting. PG&E's latest GHG emission factor for delivered electricity is available online.

Please note: The information in this document is not to be used for mandatory GHG reporting, financial analysis, or regulatory compliance, and does not necessarily reflect the approaches taken by PG&E for its own regulatory compliance purposes.

What is a GHG emission factor?

A GHG emission factor[1] is a measure of the pounds of carbon dioxide (CO_2) emitted per megawatt-hour of electricity or per therm of natural gas.

- **Electricity** generated from fossil fuels such as natural gas or coal emit CO_2, while other sources of electricity such as hydropower, wind, solar, and nuclear power are considered to be carbon-free. The electricity that PG&E delivers to customers comes from a mix of these generation sources. PG&E's emission factor for delivered electricity incorporates the annual energy and associated emissions from each generation source for the given year. Variance in PG&E's mix of electricity sources largely account for changes in PG&E's GHG emission factor from year to year.
- The **natural gas** emission factor represents the amount of GHGs emitted per therm of natural gas combusted. This emission factor does not vary because the composition of PG&E's natural gas does not change significantly over time.

Electricity Emission Factors

If you are estimating the GHG emissions generated by a business, city, county, or related entity over the course of a year, and if 100% of your electricity was purchased from PG&E, you can use the average emission factor for all the PG&E electricity delivered during that specific year.

Historic emissions: Historic average emissions factors take into account all of the sources of electricity that PG&E delivered to customers during a specific year in the past. As a founding member of the California Climate Action Registry (CCAR), PG&E

[1] An emission factor is also known as an emission rate or emission coefficient.

has emission factors that have been third-party verified starting in the year 2003. For factors prior to 2003, please see FAQ #2.

Current/Future emissions: Because of the multiple sources of power used in the course of a year and the rigorous process PG&E follows to have its emissions independently verified by a third party, the emission factor for delivered electricity lags by a year. To estimate GHG emissions in a recent or future year for which an emission factor is not yet available, use the emissions factor forecast for PG&E's electricity in the CPUC GHG Calculator. The calculator is a publicly-available document that provides emission factor forecasts from 2012–2020 which are listed in the table below.

Avoided emissions: When you implement an energy efficiency project or install a renewable generation project (e.g., a solar photovoltaic system), you are reducing your use of electricity from the utility, and therefore are avoiding the associated GHG emissions. Determining the emissions avoided from these projects can be complicated, depending on the season and time of day the electricity was saved.

For simplicity, you can use the relevant annual emission factor to estimate the GHGs avoided from these projects. See FAQ #5 for more information.

PG&E Emissions Factor Summary

Emission Type	Emission Factor			Source
	Year	*Lbs CO_2 /MWh*	*Metric tons CO_2/MWh*	
Historical Emissions	2003	620	0.281	PG&E's third-party-verified GHG inventory submitted to the California Climate Action Registry (CCAR)[2] (2003-2008) or The Climate Registry (TCR) (2009-2011)
	2004	566	0.257	
	2005	489	0.222	
	2006	456	0.207	
	2007	636	0.288	
	2008	641	0.291	
	2009	575	0.261	
	2010	445	0.202	
	2011	393	0.178	
Future Emissions (estimated)	2012[3]	453	0.205	CPUC GHG Calculator, which provides an independent forecast of PG&E's emission factors as part of a model on how the electricity sector
	2013	431	0.196	
	2014	412	0.187	
	2015	391	0.177	
	2016	370	0.168	

[2] The 2003-2008 factors are in the Power/Utility Protocol (PUP) spreadsheet of PG&E's CCAR reports. The 2009-2011factors are in the Additional Optional Information tab of the Electric Power Sector (EPS) Report spreadsheet of PG&E's TCR report.

[3] PG&E's actual 2012 emission factor will be available in January 2014.

	2017	349	0.158	would reduce emissions under AB 32[4]
	2018	328	0.149	
	2019	307	0.139	
	2020	290	0.131	

Natural Gas Emission Factors

Historic, Current, and/or Future: The combustion of natural gas (in your stove, a furnace, or a natural gas power plant) releases CO_2. The emission factor for natural gas represents the amount of GHGs emitted per therm of natural gas combusted. Since the composition of PG&E natural gas does not change significantly over time, this factor does not change from year to year.

Emission Type		Emission Factor		Source
	Year	*Lbs CO_2/therm*	*Metric ton CO_2/therm*	
Historic, Current, or Future	All years	11.7	0.00531	U.S. Energy Information Administration[5]

UPDATES: The emissions factors will be updated annually, so please check with your PG&E account manager or the PG&E website at www.pge.com/environment for the most recent version.

Frequently Asked Questions:

1. Why do the emission factors for PG&E electricity vary from year to year? 4
2. Does PG&E have emission factors from years prior to 2003? 4
3. What emission factor should I use to calculate the emissions from electricity use in 1990? 4
4. Why do you use an average emission factor to estimate avoided emissions and not a marginal or project-specific emission factor? 5
5. What emission factor should I use if I want to estimate the emissions avoided through participation in PG&E's demand response programs? 5
6. If I am a direct access electricity customer, what emission factor should I use? 5
7. Can PG&E customers use the U.S. EPA carbon calculator to calculate the emissions from PG&E electricity? 5
8. What is the difference between the emission factors used in the U.S. EPA's Portfolio Manager benchmarking tool and PG&E's emission factors? 6
9. Does PG&E have emission factors for smaller geographic areas like cities or counties within its service territory? 6
10. What measures can I use to compare a reduction of one metric tonne of CO_2? 6
11. Why are PG&E's emission factors in CO_2 and not CO_2e (i.e. CO_2 equivalent)? 7

[4] E3, GHG Calculator version 3c, worksheet tab "CO_2 Allocations," cells AH35 - AH44.
[5] U.S. Energy Information Administration, Voluntary Reporting of Greenhouse Gases Program.

12. Why don't PG&E's emission factors include the emissions associated with the delivery of electricity or natural gas? 7
13. Who can I contact at PG&E to ask questions about emission factors? 7

1. Q: Why do the emission factors for PG&E electricity vary from year to year?
   A: PG&E's electricity emission factors vary primarily because the amount of available hydroelectricity varies from year to year. During drought years, less hydroelectricity is available and other power sources (usually natural gas generation) are used instead.

   Emission factors also change, but less significantly, based on variables such as change in demand due to weather (hot summers mean more air conditioning demand). Increased demand on a short-term basis is generally met by fossil fuel generation, which raises the average emission factor. PG&E works to mitigate demand by following California's "loading order," which involves reducing electricity demand by increasing energy efficiency and demand response, and meeting new long-term generation needs first with renewable and distributed generation resources, and second with clean fossil-fueled generation. The loading order was adopted in the 2003 Energy Action Plan prepared by the California energy agencies[6].

   Over time, PG&E's emission factor is also decreasing as we make steady progress toward California's target of 33% renewables by the end of 2020.

2. Q: Does PG&E have emission factors from years prior to 2003?
   A: PG&E was among the earliest companies to voluntarily quantify and report its GHG emissions using rigorous, publicly-vetted GHG reporting standards. As a charter member of the California Climate Action Registry which later grew into The Climate Registry, PG&E has voluntarily registered and publicly reported its third-party verified GHG inventory every year since 2003. Prior to 2003, there were no commonly-accepted guidelines to report the GHG emission factors from a utility. If you would like to calculate emissions prior to 2003, you can use the 1990 emission factor in FAQ #3 below.

3. Q: What emission factor should I use to calculate the emissions from electricity use in 1990?
   A: You can use the factor from a study published by Lawrence Berkeley National Laboratory, which cites an emission factor of 0.070 kg C/kWh for PG&E in 1990.[7] This figure translates to approximately 572 lbs CO_2/MWh or 0.259 metric tons CO_2/MWh.[8]

---

[6] Implementing California's Loading Order for Electricity Resources.
[7] LBNL-49945, Marnay *et al*, Estimating the CO_2 emissions factors for the California Electric Power Sector, August 2002.
[8] Assuming 1 kg CO_2 = 0.27 kg C and 2.2046 lbs/kg.

4. Q:Why do you use an average emission factor to estimate avoided emissions and not a marginal[9] or project-specific emission factor?
   A: For the purposes of climate action planning or voluntary tracking and reporting, using an average emission factor simplifies the emissions calculation process. While some large entities may be required to estimate the amount of GHGs avoided by using emission factors specific to the hours of the day, the days of the year, or the seasons in which the energy use was avoided, the use of an average emission factor is appropriate for most customers.

5. Q: What emission factor should I use if I want to estimate the emissions avoided through participation in PG&E's demand response programs[10]?
   A: For the purposes of climate action planning or voluntary tracking or reporting, an average emission factor is appropriate. If you are participating in a third-party Demand Response program, you may reach out to your program manager for further guidance. Using the average factor is a simplification and may not reflect the approach taken by large entities for regulatory compliance purposes.

6. Q: If I am a direct access electricity customer, what emission factor should I use?
   A: If you are a direct access customer, you should contact your direct access electricity provider for the appropriate emission factor. If the emission factor is unavailable, The Climate Registry's Local Government Operations Protocol and the World Resources Institute's GHG Protocol recommend using the EPA Emissions & Generation Resource Integrated Database (eGRID) annual output emission factors for the WECC California (CAMX) sub-region.

7. Q: Can PG&E customers use the U.S. EPA carbon calculator to calculate the emissions from PG&E electricity?
   A: PG&E does not recommend that customers use this calculator. The EPA calculator uses an average emission factor for electricity generated nationwide. PG&E's emission factor is independently verified and based on the PG&E-specific mix of electricity delivered to PG&E customers. Because of PG&E's higher use of lower- and zero-emission generation sources, PG&E's emission factor is more than 60 percent cleaner than the national average.[11] Using the EPA carbon calculator would dramatically overstate PG&E customers' emissions and any emissions savings associated with energy efficiency projects.

---

[9] A marginal emission factor represents the emissions from electricity generated "at the margin", i.e., electricity generated in response to an additional unit of electricity demand. In California, this factor is typically that of a natural gas power plant, because this type of plant is most frequently deployed when electricity demand increases in the state. The California Air Resources Board (ARB) uses a marginal emission factor for California of 944 lbs CO_2e/MWh. *See*: ARB, Mandatory Reporting Requirement Final Regulation, Section 95111(b)(1).

[10] PG&E's demand response programs offer incentives to customers that volunteer and participate by temporarily reducing their electricity use when demand could outpace supply.

[11] PG&E website: http://www.pge.com/myhome/environment/pge/cleanenergy/index.shtml.

8. Q: What is the difference between the emission factors used in the U.S. EPA's Portfolio Manager benchmarking tool and PG&E's emission factors?
   A: The EPA tool uses emission factors from the EPA Emissions & Generation Resource Integrated Database (eGRID), which are derived from utility data for each of the 26 sub-regions of the U.S. power grid. Users are not able to enter a PG&E-specific emission factor into the tool. Instead, based on the zip code of each building entered, Portfolio Manager identifies the appropriate sub-region and emission factor, and provides a graphic comparison of the sub-region's emission factor and electric generation fuel mix to the national factor. PG&E customers are in the WECC[12] California (CAMX) sub-region. Because eGRID's WECC California emission factor has consistently been higher than PG&E's historic emission factors, customers should understand that this tool overestimates emissions from buildings that use PG&E electricity.

   The tool also gives users the choice of selecting a specific power generation facility, which is not generally appropriate for the purposes of climate action planning or voluntary tracking and reporting, since the electricity delivered by PG&E to customers comes from a variety of sources.

9. Q: Does PG&E have emission factors for smaller geographic areas like cities or counties within its service territory?
   A: No, PG&E's emission factor is based on the electricity delivered to all of its customers. Because electricity enters PG&E's electrical transmission and distribution system from multiple sources and gets distributed throughout the system to customers, it is not possible to calculate emission factors for specific geographic areas.

10. Q: What measures can I use to compare a reduction of one metric tonne of CO_2?
    A: Reducing one metric ton (2204.6 lbs) of CO_2 is approximately equivalent to:
    - Taking 0.21 of an average passenger car in California off the road for a year in 2011;[13]
    - Avoiding the use of 112 gallons of gasoline;[14] or
    - Eliminating the GHGs associated with about 3.3 homes in PG&E's service territory for a month.[15]

---

[12] The Western Energy Coordinating Council (WECC) is a regional organization that promotes reliable electric service by establishing operating criteria and facilitating electric system support between utilities.

[13] California Air Resources Board's EMFAC 2011 model indicates an average passenger car in California in 2011 emitted 4.76 metric tons (5.24 short tons) of CO_2 per car per year.

[14] U.S. EPA website: http://www.epa.gov/cleanenergy/energy-resources/refs.html#gasoline.

[15] In PG&E's service territory in 2011, the average residential customer consumed 0.584 MWh and 38 therms per month. 0.584 MWh/home times 0.178 metric tonnes (MT) CO2/MWh in 2011 is approximately 0.104 MT of CO2 per home each month for electricty. 38 therms/home times 0.00531 MT of CO2 per therm is approximately 0.202 MT of CO2 per month. Combined energy use per house accounts for about 0.306 MT per month. Therefore, reducing 1 MT of CO2 is equivalent to reducing the emissions for about 3.3 homes per month.

11. Q: Why are PG&E's emission factors in CO_2 (carbon dioxide) and not CO_2e (i.e. CO_2 equivalent)?[16]
    A: The electricity emission factors reported via CCAR and TCR are in pounds of CO_2 and not CO_2e because their methodology for calculating emission factors only includes CO_2 and not methane (CH_4) or nitrous oxide (N_2O) from electricity generation. CCAR and TCR do not include CH_4 or N_2O because these emissions are considered to be *de minimis*.

    However, PG&E customers can still estimate the CH_4 and N_2O emissions associated with their electricity use by using the California-specific emission factors provided by The Climate Registry's Local Government Operations Protocol[17]. For natural gas, customers can use the relevant default emission factors for natural gas provided by the same protocol[18].

12. Q: Why don't PG&E's emission factors include the emissions associated with the delivery of electricity or natural gas?
    A: The emissions associated with the delivery of electricity or natural gas are not included in PG&E's emission factors for delivered electricity or natural gas because those emissions are reported separately by PG&E in its own GHG inventory. Standard voluntary reporting practice is to report such emissions, like the emissions associated with transmission and distribution line losses, natural gas compressor stations, and vehicles used to service electricity and natural gas delivery systems, separately from the emissions attributed to the generation or use of the energy itself.

13. Q: Who can I contact at PG&E to ask questions about emission factors?
    A: Email ghgdatarequests@pge.com and a PG&E employee will get back to you shortly.

[16] CO_2e or CO_2 equivalent is a measure used to compare the emissions from various GHGs based upon their global warming potential (GWP). The CO_2e for a gas is derived by multiplying the amount of the gas by the GWP of the gas.
[17] Version 1.1, May 2010. Page 209, Table G.7: California Grid Average Electricity Emission Factors (1990-2007).
[18] Page 205, Table G.3: Default Methane and Nitrous Oxide Emission Factors by Fuel Type and Sector.

FOR INFORMATIONAL PURPOSES ONLY

Greenhouse Gas Emission Factors: Guidance for PG&E Customers

November 2015

This document is intended to help Pacific Gas and Electric Company (PG&E) customers understand the different greenhouse gas (GHG) emission factors they may use to estimate GHG emissions. GHG estimates are often used for climate action planning purposes and voluntary GHG emissions tracking or reporting.

PG&E's most recent electricity GHG emissions factor is for calendar year 2013. It can be found here. Due to the multiple sources of power used in the course of a year and the rigorous process PG&E follows to have its emissions independently verified by a third party, the emission factor for delivered electricity lags by over a year.

Please note: The information in this document is not to be used for mandatory GHG reporting, financial analysis, or regulatory compliance, and does not necessarily reflect the approaches taken by PG&E for its own regulatory compliance purposes.

What is a GHG emission factor?

A GHG emission factor[1] is a measure of the pounds of carbon dioxide (CO_2) emitted per megawatt-hour of electricity or per therm of natural gas.

- **Electricity** generated from fossil fuels such as natural gas or coal emit CO_2, while other sources of electricity such as hydropower, wind, solar, and nuclear power are considered to be carbon-free. The electricity that PG&E delivers to customers comes from a mix of these generation sources. PG&E's emission factor for delivered electricity incorporates the annual energy and associated emissions from each generation source for the given year. Variance in PG&E's mix of electricity sources largely account for changes in PG&E's GHG emission factor from year to year.
- The **natural gas** emission factor represents the amount of GHGs emitted per therm of natural gas combusted. This emission factor does not vary because the composition of PG&E's natural gas does not change significantly over time.

Electricity Emission Factors

If you are estimating the GHG emissions generated by a business, city, county, or related entity over the course of a year, and if 100% of your electricity was purchased from PG&E, you can use the average emission factor for all the PG&E electricity delivered during that specific year.

[1] An emission factor is also known as an emission rate or emission coefficient.

Historic emissions: Historic average emissions factors take into account all of the sources of electricity that PG&E delivered to customers during a specific year in the past. As a founding member of the California Climate Action Registry (CCAR), PG&E has emission factors that have been third-party verified starting in the year 2003. For factors prior to 2003, please see FAQ #2.

Current/Future emissions: Because of the multiple sources of power used in the course of a year and the rigorous process PG&E follows to have its emissions independently verified by a third party, the emission factor for delivered electricity lags by a year. To estimate GHG emissions in a recent or future year for which an emission factor is not yet available, we recommend using an average of the five most-recent coefficients available. Another resources is the emissions factor forecast for PG&E's electricity in the CPUC GHG Calculator. The calculator is a publicly-available document that provides emission factor forecasts from 2014–2020 as shown below. Please note that the CPUC published the calculator in 2010 prior to the drought, so the forecasts do not take into consideration the impact of the drought on hydroelectric power.

Avoided emissions: When you implement an energy efficiency project or install a renewable generation project (e.g., a solar photovoltaic system), you are reducing your use of electricity from the utility, and therefore are avoiding the associated GHG emissions. Determining the emissions avoided from these projects can be complicated, depending on the season and time of day the electricity was saved.

For simplicity, you can use the relevant annual emission factor to estimate the GHGs avoided from these projects. See FAQ #5 for more information.

PG&E Emissions Factor Summary

Emission Type	Emission Factor			Source
	Year	*Lbs CO_2 /MWh*	*Metric tons CO_2/MWh*	
Historical Emissions	2003	620	0.281	PG&E's third-party-verified GHG inventory submitted to the California Climate Action Registry (CCAR)[2] (2003-2008) or The Climate Registry (TCR) (2009-2013)
	2004	566	0.257	
	2005	489	0.222	
	2006	456	0.207	
	2007	636	0.288	
	2008	641	0.291	
	2009	575	0.261	
	2010	445	0.202	
	2011	393	0.178	
	2012	445	0.202	
	2013	**427**	**0.194**	
2009-2013 Average	2009-2013	457	0.2074	Average of the last five years of historical emissions
CPUC Future Emissions (estimated in 2010 prior to the drought)	2014	412	0.187	CPUC GHG Calculator, which provides an independent forecast of PG&E's emission factors as part of a model on how the electricity sector would reduce emissions under AB 32[3]
	2015	391	0.177	
	2016	370	0.168	
	2017	349	0.158	
	2018	328	0.149	
	2019	307	0.139	
	2020	290	0.131	

Natural Gas Emission Factors

Historic, Current, and/or Future: The combustion of natural gas (in your stove, a furnace, or a natural gas power plant) releases CO_2. The emission factor for natural gas represents the amount of GHGs emitted per therm of natural gas combusted. Since the composition of PG&E natural gas does not change significantly over time, this factor does not change from year to year.

Emission Type		Emission Factor		Source
	Year	*Lbs CO_2/therm*	*Metric ton CO_2/therm*	
Historic, Current, or Future	All years	11.7	0.00531	U.S. Energy Information Administration[4]

[2] The 2003-2008 factors are in the Power/Utility Protocol (PUP) spreadsheet of PG&E's CCAR reports. The 2009-2013factors are in the Additional Optional Information tab of the Electric Power Sector (EPS) Report spreadsheet of PG&E's TCR reports.
[3] E3, GHG Calculator version 3c, worksheet tab "CO_2 Allocations," cells AH35 - AH44.
[4] U.S. Energy Information Administration, Voluntary Reporting of Greenhouse Gases Program.

UPDATES: The emissions factors will be updated annually, so please check with your PG&E account manager or the PG&E website at www.pge.com/environment for the most recent version.

Frequently Asked Questions:

1. Why do the emission factors for PG&E electricity vary from year to year? 4
2. Does PG&E have emission factors from years prior to 2003? 5
3. What emission factor should I use to calculate the emissions from electricity use in 1990? 5
4. Why do you use an average emission factor to estimate avoided emissions and not a marginal or project-specific emission factor? 5
5. What emission factor should I use if I want to estimate the emissions avoided through participation in PG&E's demand response programs? 5
6. If I am a direct access electricity customer, what emission factor should I use? 6
7. Can PG&E customers use the U.S. EPA carbon calculator to calculate the emissions from PG&E electricity? 6
8. What is the difference between the emission factors used in the U.S. EPA's Portfolio Manager benchmarking tool and PG&E's emission factors? 6
9. Does PG&E have emission factors for smaller geographic areas like cities or counties within its service territory? 6

10. Why are PG&E's emission factors in CO_2 and not CO_2e (i.e. CO_2 equivalent)? 7
11. Why don't PG&E's emission factors include the emissions associated with the delivery of electricity or natural gas? 7
12. Who can I contact at PG&E to ask questions about emission factors? 7

1. Q: Why do the emission factors for PG&E electricity vary from year to year?
   A: PG&E's electricity emission factors vary primarily because the amount of available hydroelectricity varies from year to year. During drought years, less hydroelectricity is available and other power sources (usually natural gas generation) are used instead.

   Emission factors also change, but less significantly, based on variables such as change in demand due to weather (hot summers mean more air conditioning demand). Increased demand on a short-term basis is generally met by fossil fuel generation, which raises the average emission factor. PG&E works to mitigate demand by following California's "loading order," which involves reducing electricity demand by increasing energy efficiency and demand response, and meeting new long-term generation needs first with renewable and distributed generation resources, and second with clean fossil-fueled generation. The loading order was adopted in the 2003 Energy Action Plan prepared by the California energy agencies[5].

[5] Implementing California's Loading Order for Electricity Resources.

Over time, PG&E's emission factor is also decreasing as we make steady progress toward California's target of 33% renewables by the end of 2020.

2. Q: Does PG&E have emission factors from years prior to 2003?
   A: PG&E was among the earliest companies to voluntarily quantify and report its GHG emissions using rigorous, publicly-vetted GHG reporting standards. As a charter member of the California Climate Action Registry which later grew into The Climate Registry, PG&E has voluntarily registered and publicly reported its third-party verified GHG inventory every year since 2003. Prior to 2003, there were no commonly-accepted guidelines to report the GHG emission factors from a utility. If you would like to calculate emissions prior to 2003, you can use the 1990 emission factor in FAQ #3 below.

3. Q: What emission factor should I use to calculate the emissions from electricity use in 1990?
   A: You can use the factor from a study published by Lawrence Berkeley National Laboratory, which cites an emission factor of 0.070 kg C/kWh for PG&E in 1990.[6] This figure translates to approximately 572 lbs CO_2/MWh or 0.259 metric tons CO_2/MWh.[7]

4. Q:Why do you use an average emission factor to estimate avoided emissions and not a marginal[8] or project-specific emission factor?
   A: For the purposes of climate action planning or voluntary tracking and reporting, using an average emission factor simplifies the emissions calculation process. While some large entities may be required to estimate the amount of GHGs avoided by using emission factors specific to the hours of the day, the days of the year, or the seasons in which the energy use was avoided, the use of an average emission factor is appropriate for most customers.

5. Q: What emission factor should I use if I want to estimate the emissions avoided through participation in PG&E's demand response programs[9]?
   A: For the purposes of climate action planning or voluntary tracking or reporting, an average emission factor is appropriate. If you are participating in a third-party Demand Response program, you may reach out to your program manager for further guidance. Using the average factor is a simplification and may not

---

[6] LBNL-49945, Marnay *et al*, Estimating the CO_2 emissions factors for the California Electric Power Sector, August 2002.

[7] Assuming 1 kg CO_2 = 0.27 kg C and 2.2046 lbs/kg.

[8] A marginal emission factor represents the emissions from electricity generated "at the margin", i.e., electricity generated in response to an additional unit of electricity demand. In California, this factor is typically that of a natural gas power plant, because this type of plant is most frequently deployed when electricity demand increases in the state. The California Air Resources Board (ARB) uses a marginal emission factor for California of 944 lbs CO_2e/MWh. *See*: ARB, Mandatory Reporting Requirement Final Regulation, Section 95111(b)(1).

[9] PG&E's demand response programs offer incentives to customers that volunteer and participate by temporarily reducing their electricity use when demand could outpace supply.

reflect the approach taken by large entities for regulatory compliance purposes.

6. Q: If I am a direct access electricity customer, what emission factor should I use?
   A: If you are a direct access customer, you should contact your direct access electricity provider for the appropriate emission factor. If the emission factor is unavailable, The Climate Registry's Local Government Operations Protocol and the World Resources Institute's GHG Protocol recommend using the EPA Emissions & Generation Resource Integrated Database (eGRID) annual output emission factors for the WECC California (CAMX) sub-region.

7. Q: Can PG&E customers use the U.S. EPA carbon calculator to calculate the emissions from PG&E electricity?
   A: PG&E does not recommend that customers use this calculator. The EPA calculator uses an average emission factor for electricity generated nationwide. PG&E's emission factor is independently verified and based on the PG&E-specific mix of electricity delivered to PG&E customers. Because of PG&E's higher use of lower- and zero-emission generation sources, PG&E's emission factor is more than 60 percent cleaner than the national average.[10] Using the EPA carbon calculator would dramatically overstate PG&E customers' emissions and any emissions savings associated with energy efficiency projects.

8. Q: What is the difference between the emission factors used in the U.S. EPA's Portfolio Manager benchmarking tool and PG&E's emission factors?
   A: The EPA tool uses emission factors from the EPA Emissions & Generation Resource Integrated Database (eGRID), which are derived from utility data for each of the 26 sub-regions of the U.S. power grid. Users are not able to enter a PG&E-specific emission factor into the tool. Instead, based on the zip code of each building entered, Portfolio Manager identifies the appropriate sub-region and emission factor, and provides a graphic comparison of the sub-region's emission factor and electric generation fuel mix to the national factor. PG&E customers are in the WECC[11] California (CAMX) sub-region. Because eGRID's WECC California emission factor has consistently been higher than PG&E's historic emission factors, customers should understand that this tool overestimates emissions from buildings that use PG&E electricity.

   The tool also gives users the choice of selecting a specific power generation facility, which is not generally appropriate for the purposes of climate action planning or voluntary tracking and reporting, since the electricity delivered by PG&E to customers comes from a variety of sources.

9. Q: Does PG&E have emission factors for smaller geographic areas like cities or counties within its service territory?

[10] PG&E website: http://www.pge.com/myhome/environment/pge/cleanenergy/index.shtml.
[11] The Western Energy Coordinating Council (WECC) is a regional organization that promotes reliable electric service by establishing operating criteria and facilitating electric system support between utilities.

A: No, PG&E's emission factor is based on the electricity delivered to all of its customers. Because electricity enters PG&E's electrical transmission and distribution system from multiple sources and gets distributed throughout the system to customers, it is not possible to calculate emission factors for specific geographic areas.

•

10. Q: Why are PG&E's emission factors in CO_2 (carbon dioxide) and not CO_2e (i.e. CO_2 equivalent)?[12]
    A: The electricity emission factors reported via CCAR and TCR are in pounds of CO_2 and not CO_2e because their methodology for calculating emission factors only includes CO_2 and not methane (CH_4) or nitrous oxide (N_2O) from electricity generation. CCAR and TCR do not include CH_4 or N_2O because these emissions are considered to be *de minimis*.

    However, PG&E customers can still estimate the CH_4 and N_2O emissions associated with their electricity use by using the California-specific emission factors provided by The Climate Registry's Local Government Operations Protocol[13]. For natural gas, customers can use the relevant default emission factors for natural gas provided by the same protocol[14].

11. Q: Why don't PG&E's emission factors include the emissions associated with the delivery of electricity or natural gas?
    A: The emissions associated with the delivery of electricity or natural gas are not included in PG&E's emission factors for delivered electricity or natural gas because those emissions are reported separately by PG&E in its own GHG inventory. Standard voluntary reporting practice is to report such emissions, like the emissions associated with transmission and distribution line losses, natural gas compressor stations, and vehicles used to service electricity and natural gas delivery systems, separately from the emissions attributed to the generation or use of the energy itself.

12. Q: Who can I contact at PG&E to ask questions about emission factors?
    A: Email ghgdatarequests@pge.com and a PG&E employee will get back to you shortly.

[12] CO_2e or CO_2 equivalent is a measure used to compare the emissions from various GHGs based upon their global warming potential (GWP). The CO_2e for a gas is derived by multiplying the amount of the gas by the GWP of the gas.
[13] Version 1.1, May 2010. Page 209, Table G.7: California Grid Average Electricity Emission Factors (1990-2007).
[14] Page 205, Table G.3: Default Methane and Nitrous Oxide Emission Factors by Fuel Type and Sector.

APPENDIX B

Trip Generation Memorandum

FEHR PEERS

MEMORANDUM

Date: June 9, 2016

To: Miroo Desai, City of Emeryville

From: Kathrin Tellez, Fehr & Peers

Subject: Trip Generation - Sherwin-Williams

WC14-3200

This memorandum provides additional information related to the trip generation approach used to estimate trip generation for all models of travel for the proposed Sherwin-Williams Development Project Environmental Impact Report (EIR), which was circulated for public review in January 2016. The information contained in this document is intended to build upon information already presented in the EIR and associated technical appendices.

This memorandum is organized to introduce the concept of trip generation, limitations to the traditional approach, factors considered in the Sherwin-Williams trip generation calculations, mixed-use trip generation validation information, information related to other certified EIRs that have used a similar trip generation approach, and applicability to the Sherwin-Williams site.

INTRODUCTION

Trip generation refers to the process of estimating the amount of vehicular traffic a project might add to the local roadway network. In addition to estimates of daily traffic, estimates are typically development for the peak one-hour periods during the morning (AM) and evening (PM) commute hours, when traffic volumes on adjacent streets are typically at their highest. For the Sherwin-Williams project, estimates for peak Saturday conditions were also prepared since traffic volumes in the area are higher on Saturdays than weekdays due to the retail centers on Shellmound Street and 40th Street.

The traditional methods commonly used by traffic engineers to calculate the trip generating potential of developments in urban areas with a variety of travel options, such as Emeryville, can overestimate their impacts because the methods do not accurately reflect the amount of trips made by transit, biking, and/or walking. This results in increased development costs due to oversized infrastructure, and skewed public perception of the likely impacts of development.

STANDARD ITE APPROACH

The most common method used by traffic engineers is outlined in the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (9th Edition). This method contains data primarily collected at suburban, single-use, freestanding sites. This limits the applicability of the data to urban areas, such as the project, which is located in a dense, walkable, urban setting with a mix of land uses, and with nearby local and regional transit service. This method does not adequately account for key variables that influence travel such as development density and scale, location efficiency, land use mix in close proximity to the site, urban design and transit orientation. Nor does the ITE method account for demographic characteristics, such as average vehicle ownership.

Guidance in the Trip Generation Manual Handbook indicates that "*At specific sites, the user may wish to modify trip generation rates presented in this document to reflect the presence of public transportation service, ridesharing, or other transportation demand management measures; enhanced pedestrian and bicycle trip-making opportunities; or other special characteristics of the site or surrounding area.*"[1] Based on this guidance, Fehr & Peers reviewed other methods to estimate the trip generating characteristics of the site.

FACTORS CONSIDERED

The approach to develop trip generation estimates for the Sherwin-William project considered many factors, including:

High presence of pedestrians and bicyclists at intersections in the study area - At the intersection of Horton Street at Sherwin Avenue, bicycle and pedestrian activity accounts for 20 percent of the total travel through the intersection during the weekday and Saturday peak hours.

---

[1] ITE Trip Generation Manual Handbook, 3rd Edition.

High levels of transit in the project vicinity and city as a whole – Project area is served by 9 AC transit routes and 3 Emery-go-Round routes, with 29 buses stopping in the project vicinity during peak hours. In 2014, the Emery-go-Round system experienced 1.7 million boarding's[2], or an average of 4,650 boardings per day. Based on the number of residents and employees within the City in 2014 (combined approximately 30,000 people), average daily boarding's on the Emery-go-Round system is approximately 15 percent of the population (while this does not account for visitor and retail trips, it is a proxy for the level of transit activity in the area).

Number of Jobs available within a 30-minute transit ride – there are approximately 300,000 jobs within a 30-minute door-to-door transit ride of the project vicinity, including many in Downtown areas where parking is expensive and constrained, making transit an attractive commute option.

Lower levels of vehicle ownership in the surrounding area than suburban areas – based on American Community Survey data, average vehicle ownership in the census tracts surrounding the project site is approximately 1.25 to 1.50 vehicles per household. In more suburban area, average vehicle ownership rates can be well over 2 vehicles per household.

Shift in travel behavior in Emeryville – Recent travel behavior modeling from Alameda CTC has indicated a shift of upwards of 10 percent of trip making from auto to non-auto modes relative to existing conditions for Emeryville on a city-wide basis by the year 2040. Trends between Census 2000 and 2010 have indicated a shift in travel behavior from auto to non-auto modes.

Required Transportation Demand Management Elements – The project would be required to incorporate by design a number of transportation demand management strategies as well as develop a project specific plan. Elements that are required of all projects include:

- Vehicular parking maximums as opposed to minimums
- High bicycle parking requirements
- Unbundling of residential parking from unit cost
- Contributions to the Property Based Business Improvement District to fund Emery-go-Round
- Payment of the City's Transportation Impact Fee to fund city-wide multi-modal transportation improvements.

---

[2] http://ca-emeryville.civicplus.com/DocumentCenter/View/7903

As part of the project, other project specific elements would be included, such as:

- Provision of a bicycle share station on the site
- Provision of car-share pods on the site
- Sidewalk and trail improvements along the project frontage

Based on these considerations, application of standard Institute of Transportation Engineers Trip Generation rates would overstate the potential vehicle trip generation of the proposed project.

MXD MODEL VALIDATION

Research to identify factors that influence trip generation emerged in 1997. The initial research was expanded and two significant new research studies provided the opportunity to improve the state of practice. As documented in the Environmental Impact Report, one study sponsored by the US EPA[3] and another by the Transportation Research Board[4] have developed means to improve trip generation estimation for mixed-use developments (MXDs) and those located in urban areas. The two studies examined over 260 MXD sites throughout the U.S. and, using different approaches, developed new quantification methods. Since the conclusion of the EPA sponsored study, Fehr & Peers has been actively enhancing the MXD model to improve sensitivity to various site characteristics, improve peak hour performance, and continue to validate the model against MXDs where data is available.

A set of 27 independent (that is - not included in the MXD model derivation) MXD sites across the country that were not included in the initial model development have been tested to validate the model. These sites represent locations where it is expected that traditional data and methodologies, such as ITE, would not accurately estimate the Project vehicle trip generation. The use of these 27 sites as a validation site data set independent from the model derivation site data sets is consistent with appropriate statistical techniques to prevent confirmation bias by using only one set of data. **Table 1** presents the performance of the MXD+ model against ITE and ITE internalization procedures.

---

[3] *Traffic Generated by Mixed-Use Developments—A Six-Region Study Using Consistent Built Environmental Measures* (Ewing et al, ASCE UP0146, Sept 2011).

[4] National Cooperative Highway Research Program (NCHRP) Report 684 *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments* (Bochner et al, March 2011).

For the 27 mixed-use validation sites that were surveyed in California and across the country, the ITE method overestimated daily traffic generation by 24 percent and peak hour traffic by 35 percent to 37 percent. The MXD+ method explains 97 percent of the variation in trip generation among MXDs, compared to 65 percent for the methods previously recommended by ITE. While remaining slightly (2 percent to 4 percent) conservative to avoid systematically understating impacts, MXD+ substantially reduces the 35 percent - 37 percent average overestimate of traffic generation produced by conventional ITE methods. Data from the validation sites is provided in **Table 2**.

Of the model validation sites, several are within the size range of the proposed project (5 to 15 acres) and on average, the actual observed vehicle trip generation was 29 to 43 percent less than predicted by standard ITE rates alone. In addition to the proposed project being within the bounds of the size range of the model derivation set, it is also within the population, employment, and activity density bounds of the model derivation set. In addition it is within two standard deviations of the average for each of the above metrics as well. These checks confirm that MXD+ is appropriate to use for the proposed project.

TABLE 1
MXD+ MODEL
VALIDATION STATISTICS COMPARISON

Validation Statistic	ITE raw	ITE with internalization	MXD+ model
Daily			
Average Model Error[1]	28%	16%	**2%**
% RMSE[2]	40%	27%	**17%**
R-Squared[3]	0.77	0.89	**0.96**
AM Peak Hour			
Average Model Error	54%	49%	**12%**
% RMSE	54%	53%	**21%**
R-Squared	0.81	0.81	**0.97**
PM Peak Hour			
Average Model Error	49%	35%	**4%**

TABLE 1
MXD+ MODEL
VALIDATION STATISTICS COMPARISON

Validation Statistic	ITE raw	ITE with internalization	MXD+ model
% RMSE	64%	49%	**15%**
R-Squared	0.40	0.65	**0.97**

1. Average model error measures the difference between the estimated trip generation and the counted trip generation of the 28 survey sites.
2. RMSE stands for percent root mean squared error is a demand assessment of performance of transportation models in that it does not apply average that would allow over-estimates and under-estimates to cancel one another out and it penalizes proportionally more for large errors. A % RMSE of less than 40% is generally considered acceptable in transportation modeling.
3. R-squared is a statistical measure that indicates, in this case, the degree to which each method explains the variation in trip generation among the 27 survey sites. A R-Squared value closer to 1.0 indicates that the method fully explains the variation in trip generation amongst the survey sites and would be suitable to be used for that set of site types.

Source: Fehr & Peers, 2013.

TABLE 2
MXD MODEL VALIDATION SITES

Name	Location	Site Size (acres)	Description	% Reduction
Atlantic Station	Atlanta, GA	138	1,030 MF DUs 480 KSF retail 510 KSF office 100 hotel rooms 20 movie screens	20-36% reduction
Boca Del Mar	Boca Raton, FL	253	510 SF DUs 630 MF DUs 200 KSF retail 300 KSF office	15-30% reduction
Celebration	Celebration, FL	3,500	2,230 SF DUs 1,870 MF DUs 60 KSF retail 1,020 KSF office 100 hotel rooms	27-33% reduction
Country Isles	Weston, FL	61	370 MF DUs 190 KSF retail 60 KSF office 10 movie screens	9-17% reduction

TABLE 2
MXD MODEL VALIDATION SITES

Name	Location	Site Size (acres)	Description	% Reduction
Crocker Center	Boca Raton, FL	29	80 KSF retail 200 KSF office 170 hotel rooms	9-22% reduction
Galleria	Ft. Lauderdale, FL	165	180 SF DUs 260 MF DUs 1,020 KSF retail 90 KSF office 230 hotel rooms	14-27% reduction
Gateway Oaks	Sacramento, CA	227	1,350 MF DUs 10 KSF retail 1,080 KSF office 190 hotel rooms	17-22% reduction
Jamboree Center	Irvine, CA	128	510 MF DUs 140 KSF retail 1,850 KSF office 60 KSF industrial 520 hotel rooms	17-26% reduction
Legacy Town Center	Plano, TX	75	1,360 MF DUs 270 KSF retail 310 KSF office 400 hotel rooms 10 movie screens	29-45% reduction
Mizner Park	Boca Raton, FL	30	140 MF DUs 120 KSF retail 90 KSF office 10 movie screens	20-34% reduction
Mockingbird Station	Dallas, TX	9	190 MF DUs 170 KSF retail 90 KSF office 10 movie screens	29-43% reduction
Moraga	Moraga, CA	2,444	5,200 SF DUs 750 MF DUs 270 KSF retail 1,110 KSF office 10 movie screens	20-29% reduction
Park Place	Irvine, CA	109	160 MF DUs 90 KSF retail 1,640 KSF office	17-24% reduction

TABLE 2
MXD MODEL VALIDATION SITES

Name	Location	Site Size (acres)	Description	% Reduction
South Davis	Davis, CA	791	2,380 SF DUs 2,070 MF DUs 460 KSF retail 460 KSF office 60 KSF industrial 170 hotel rooms	27-42% reduction
The Villages	Irvine, CA	32	1,130 MF DUs	12-18% reduction
Rio Vista Station Village	San Diego, CA	16	920 MF DUs 20 KSF retail	26-35% reduction
La Mesa Village Plaza	La Mesa, CA	6	90 MF DUs 30 KSF retail 10 KSF office	31-49% reduction
Uptown Center	Hillcrest, CA	14	300 MF DUs 130 KSF retail	27-40% reduction
The Village at Morena Linda Vista	San Diego, CA	7	180 MF DUs 30 KSF retail	29-41% reduction
Hazard Center	San Diego, CA	16	110 KSF retail 260 KSF office 240 hotel rooms 10 movie screens	21-36% reduction
Otay Ranch	Chula Vista, CA	16	240 MF DUs 40 KSF retail 60 KSF office	11-20% reduction
Bay Street	Emeryville, CA	22	380 MF DUs 380 KSF retail 20 movie screens	26-39% reduction
Larkspur Landing	Larkspur, CA	65	250 SF DUs 340 MF DUs 140 KSF retail 310 KSF office 120 hotel rooms	10-21% reduction

TABLE 2
MXD MODEL VALIDATION SITES

Name	Location	Site Size (acres)	Description	% Reduction
Redwood Shores	Redwood City, CA	2,000	2,200 SF DUs 2,260 MF DUs 400 KSF retail 5,880 KSF office 170 KSF industrial 420 hotel rooms 1,040 students	14-23% reduction
Redstone	Park City, UT	52	300 MF DUs 200 KSF retail 50 KSF office 10 movie screens	15-25% reduction
Quarry Bend	Sandy, UT	100	380 MF DUs 420 KSF retail	12-16% reduction
Southern Village	Chapel Hill, NC	250	510 SF DUs 590 MF DUs 10 KSF retail 100 KSF office 610 students	15-21% reduction

Source: Fehr and Peers, 2013.

USE IN OTHER CERTIFIED ENVIRONMENTAL IMPACT REPORTS

The MXD method has been used to refine the trip generation estimates for other developments in California subject to CEQA review. **Table 3** presents a partial list of studies and their current status.

TABLE 3
CERTIFIED EIRS USING MXD MODEL

Name	Date Published	Jurisdiction	Description	% Reduction
Treasure Island DEIR[1]	July 2010	City of San Francisco	8,000 DUs 140,000 SF retail 100,000 SF office 311,000 SF commercial flex 274,000 SF other	56-61% reduction
Candlestick Point / Hunters Point DEIR[2]	November 2009	City of San Francisco	10,500 DUs 885,000 SF retail 2,650,000 SF office/R&D	44-50% reduction
Parkmerced DEIR[3]	May 2010	City of San Francisco	8,900 DUs 230,000 SF retail 105,000 SF office 164,000 SF other	34-38% reduction
Fairfield Train Station DEIR[4]	December 2010	City of Fairfield	6,790 DUs 150,000 SF retail	25% reduction
Redwood City Downtown Precise Plan DEIR[5]	August 2010	Redwood City	2,500 DUs 221,000 SF retail 275,000 SF office	21-29% reduction
Pittsburg/Bay Point BART Station Master Plan DEIR[6]	June 2011	City of Pittsburg	1,168 DU 95,000 SF retail 50,000 SF office	26-32% reduction
Newhall Ranch Draft EIS/EIR[7]	April 2009	Los Angeles County U.S. Army Corps of Engineers	21,000 DUs 5,500,000 SF commercial	29-33% reduction
Broadway-Valdez District Specific Plan[8]	June 2014	City of Oakland	1,796 DUs 1,118,345 SF retail 694,730 SF office 180 Hotel rooms	27-34% reduction
Coliseum City Specific Plan[9]	April 2015	City of Oakland	4,000 DUs 408,000 SF retail 1,500,000 SF office/R&D 875 Hotel rooms	40-48% reduction

1. http://sfplanning.org/index.aspx?page=1828#2007_0903E
2. http://sfplanning.org/index.aspx?page=1828#2007_0946E
3. http://sfplanning.org/index.aspx?page=1828#2008_0021E
4. http://www.fairfield.ca.gov/gov/depts/cd/planning/train_station_deir.asp
5. http://www.redwoodcity.org/phed/planning/precise/FINAL-DTPP/EIR.htm
6. http://www.ci.pittsburg.ca.us/index.aspx?page=225
7. http://www.dfg.ca.gov/regions/5/newhall/final/
8. http://www.ceqanet.ca.gov/ProjDocList.asp?ProjectPK=616802
9. http://www.ceqanet.ca.gov/ProjDocList.asp?ProjectPK=623664

Source: Fehr and Peers, 2016.

APPLICABILITY TO SHERWIN-WILLIAMS SITE

Prior to the application of the trip generation model to estimate trip generation for the proposed Sherwin-Williams project, the project parameters where reviewed against the characteristic of the sites that were used to develop and validate the MXD model. The factors that were specifically reviewed include project size, mixture of residential land uses, and mixture of non-residential land uses. If the project uses and size falls outside the range of data collected at other sites used to develop the model, the user is cautioned against using the MXD model. For the Sherwin-Williams site, the project site and land use mixture falls within the range of other sites and the MXD model is an appropriate tool to generate project trip estimates. In addition to the proposed project being within the bounds of the size range of the model derivation set, it is also within the population, employment, and activity density bounds of the model derivation set. In addition it is within two standard deviations of the average for each of the above metrics as well. These checks confirm that MXD+ is appropriate to use for the proposed project.

Once it was confirmed that the project characteristics fit within the range of sites used to develop and validate the model, site specific information was input into the model, including information related to the surrounding roadway network, the number of jobs within a 30-minute door-to-door commute, and expected average vehicle ownership. The initial results were compared to other published data sources for reasonableness, as well as against transportation trends, including tends of lower levels of auto-ownership in the area as wells as increasing transit mode shares for all trip types. Transportation demand management measures that would be incorporated in to the site design, as well as be required on-going were also reviewed, including:

- Vehicular parking maximums as opposed to minimums
- High bicycle parking requirements
- Unbundling of residential parking from unit cost
- Contributions to the Property Based Business Improvement District to fund Emery-go-Round
- Payment of the City's Transportation Impact Fee to fund city-wide multi-modal transportation improvements.
- Provision of a bicycle share station on the site
- Provision of car-share pods on the site
- Sidewalk and trail improvements along the project frontage

Based on the MXD model parameters, the proposed project components, the location of the project and the transportation demand management strategies that would be incorporated into the project, the resulting vehicle trip generation estimates are 35 to 40 percent lower than what would be estimated through the use of standard Institute of Transportation Engineers rates. While these estimates are lower than compared to existing observed travel behavior, the proposed project includes transportation demand management strategies that are currently not widespread in Emeryville. However, as documented in the *Trip Generation Manual*, these adjustments are appropriate and reasonable for estimating the trip generating potential of mixed-use projects in urban areas served by transit.

This completes our overview of the trip generation parameters for the Sherwin-Williams site. Please call Kathrin at 925-930-7100 with questions.

APPENDIX C

MXD Model Validation Data

Independent Validation Sites

MXD MODEL
VALIDATION SITES

Name	Location	Site Size (acres)	Description	% Reduction
Atlantic Station	Atlanta, GA	138	1,030 MF DUs 480 KSF retail 510 KSF office 100 hotel rooms 20 movie screens	20-36% reduction
Boca Del Mar	Boca Raton, FL	253	510 SF DUs 630 MF DUs 200 KSF retail 300 KSF office	15-30% reduction
Celebration	Celebration, FL	3,500	2,230 SF DUs 1,870 MF DUs 60 KSF retail 1,020 KSF office 100 hotel rooms	27-33% reduction
Country Isles	Weston, FL	61	370 MF DUs 190 KSF retail 60 KSF office 10 movie screens	9-17% reduction
Crocker Center	Boca Raton, FL	29	80 KSF retail 200 KSF office 170 hotel rooms	9-22% reduction
Galleria	Ft. Lauderdale, FL	165	180 SF DUs 260 MF DUs 1,020 KSF retail 90 KSF office 230 hotel rooms	14-27% reduction

MXD MODEL
VALIDATION SITES

Name	Location	Site Size (acres)	Description	% Reduction
Gateway Oaks	Sacramento, CA	227	1,350 MF DUs 10 KSF retail 1,080 KSF office 190 hotel rooms	17-22% reduction
Jamboree Center	Irvine, CA	128	510 MF DUs 140 KSF retail 1,850 KSF office 60 KSF industrial 520 hotel rooms	17-26% reduction
Legacy Town Center	Plano, TX	75	1,360 MF DUs 270 KSF retail 310 KSF office 400 hotel rooms 10 movie screens	29-45% reduction
Mizner Park	Boca Raton, FL	30	140 MF DUs 120 KSF retail 90 KSF office 10 movie screens	20-34% reduction
Mockingbird Station	Dallas, TX	9	190 MF DUs 170 KSF retail 90 KSF office 10 movie screens	29-43% reduction
Moraga	Moraga, CA	2,444	5,200 SF DUs 750 MF DUs 270 KSF retail 1,110 KSF office 10 movie screens	20-29% reduction

MXD MODEL
VALIDATION SITES

Name	Location	Site Size (acres)	Description	% Reduction
Park Place	Irvine, CA	109	160 MF DUs 90 KSF retail 1,640 KSF office	17-24% reduction
South Davis	Davis, CA	791	2,380 SF DUs 2,070 MF DUs 460 KSF retail 460 KSF office 60 KSF industrial 170 hotel rooms	27-42% reduction
The Villages	Irvine, CA	32	1,130 MF DUs	12-18% reduction
Rio Vista Station Village	San Diego, CA	16	920 MF DUs 20 KSF retail	26-35% reduction
La Mesa Village Plaza	La Mesa, CA	6	90 MF DUs 30 KSF retail 10 KSF office	31-49% reduction
Uptown Center	Hillcrest, CA	14	300 MF DUs 130 KSF retail	27-40% reduction
The Village at Morena Linda Vista	San Diego, CA	7	180 MF DUs 30 KSF retail	29-41% reduction

MXD MODEL
VALIDATION SITES

Name	Location	Site Size (acres)	Description	% Reduction
Hazard Center	San Diego, CA	16	110 KSF retail 260 KSF office 240 hotel rooms 10 movie screens	21-36% reduction
Otay Ranch	Chula Vista, CA	16	240 MF DUs 40 KSF retail 60 KSF office	11-20% reduction
Bay Street	Emeryville, CA	22	380 MF DUs 380 KSF retail 20 movie screens	26-39% reduction
Larkspur Landing	Larkspur, CA	65	250 SF DUs 340 MF DUs 140 KSF retail 310 KSF office 120 hotel rooms	10-21% reduction
Redwood Shores	Redwood City, CA	2,000	2,200 SF DUs 2,260 MF DUs 400 KSF retail 5,880 KSF office 170 KSF industrial 420 hotel rooms 1,040 students	14-23% reduction
Redstone	Park City, UT	52	300 MF DUs 200 KSF retail 50 KSF office 10 movie screens	15-25% reduction

MXD MODEL
VALIDATION SITES

Name	Location	Site Size (acres)	Description	% Reduction
Quarry Bend	Sandy, UT	100	380 MF DUs 420 KSF retail	12-16% reduction
Southern Village	Chapel Hill, NC	250	510 SF DUs 590 MF DUs 10 KSF retail 100 KSF office 610 students	15-21% reduction

Source: Fehr and Peers, 2013.

Validation of MXD+ model

Since the conclusion of the EPA sponsored study, Fehr & Peers has been actively enhancing the MXD model to improve sensitivity to various site characteristics, improve peak hour performance, and continue to validate the model against MXDs where data is available.

A set of 27 independent MXD sites across the country that were not included in the initial model development have been tested to validate the model. These sites represent locations where it is expected that traditional data and methodologies, such as ITE, would not accurately estimate the Project vehicle trip generation. **Table A1** presents the performance of the MXD model against ITE and ITE internalization procedures.

TABLE A1
MXD+ MODEL
VALIDATION STATISTICS COMPARISON

Validation Statistic	ITE raw	ITE with internalization	MXD+ model
Daily			
Average Model Error[1]	28%	16%	**2%**
% RMSE[2]	40%	27%	**17%**
R-Squared[3]	0.77	0.89	**0.96**
AM Peak Hour			
Average Model Error	54%	49%	**12%**
% RMSE	54%	53%	**21%**
R-Squared	0.81	0.81	**0.97**
PM Peak Hour			
Average Model Error	49%	35%	**4%**
% RMSE	64%	49%	**15%**
R-Squared	0.40	0.65	**0.97**

1. Average model error measures the difference between the estimated trip generation and the counted trip generation of the 28 survey sites.
2. RMSE stands for percent root mean squared error is a demand assessment of performance of transportation models in that it does not apply average that would allow over-estimates and under-estimates to cancel one another out and it penalizes proportionally more for large errors. A % RMSE of less than 40% is generally considered acceptable in transportation modeling.
3. R-squared is a statistical measure that indicates, in this case, the degree to which each method explains the variation in trip generation among the 27 survey sites. A R-Squared value closer to 1.0 indicates that the method fully explains the variation in trip generation amongst the survey sites and would be suitable to be used for that set of site types.

Source: Fehr & Peers, 2013.