FINAL SUBSEQUENT INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

CORDOVA BUSINESS CENTER PROJECT

December 2024

SCH No. 2024100839

RESPONSE TO COMMENTS

Prepared for:

TOWN OF APPLE VALLEY

14955 Dale Evans Parkway
Apple Valley, California 92307

Contact: Rick Hirsch, Town Consulting Planner

Prepared by:

Entitlement Strategies Group, Inc.
40 Years Charting the Course to Exceptional Development

24005 Ventura Blvd.
Calabasas, CA 91302
Contact: Toby Waxman, CEO

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1 INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA) Section 15073, the Cordova Business Center Project Draft Subsequent Initial Study / Mitigated Negative Declaration (SIS/MND) was circulated for review for 30 days beginning on October 16, 2004 and ending on November 18, 2024. In response to the publication of the Draft SIS/MND for public review, comments were received by the Town of Apple Valley (Lead Agency) via email from members of the public.

Although CEQA does not require written responses to comments on an SIS/MND this document presents the comments received during the public comment period and provides responses from the Lead Agency that are incorporated into the SIS/MND. All comments have been reviewed and addressed by the consulting firm that prepared the subject technical studies referenced in the comments. Based on the technical analyses by the technical consulting firm, no new significant environmental impacts were identified.

In accordance with CEQA Section *15074 Consideration and Adoption of a Negative Declaration or Mitigated Negative Declaration*, the Town of Apple Valley (Lead Agency) has considered the proposed mitigated negative declaration together with the comments received during the 30-day public review process. The Town has determined that on the basis of the whole record before it including the Subsequent Initial Study prepared for the proposed Project and any comments received that there is no substantial evidence that the project will have a significant effect on the environment and that the mitigated negative declaration reflects Town's independent judgment and analysis.

In making the findings in adopting a mitigated negative declaration pursuant to *CEQA Section 21081.6. subdivision (a), paragraphs (1) and (2)* the following requirements have been met. CEQA provides that if a lead agency determines that a proposed project, not otherwise exempt from this division, would not have a significant effect on the environment, the lead agency shall adopt a negative declaration to that effect. The negative declaration shall be prepared for the proposed project in either of the following circumstances:

(1) There is no substantial evidence, in light of the whole record before the lead agency, that

the project may have a significant effect on the environment.

(2) An initial study identifies potentially significant effects on the environment, but (A) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and (B) there is no substantial evidence, in light of the whole record before the lead agency, that the project, as revised, may have a significant effect on the environment.[1]

In making the findings in adopting a mitigated negative declaration pursuant to *CEQA Section 21081.6. subdivision (a), paragraphs (1) and (2)* the following requirements have been met:

(1) The Town has prepared and shall adopt a mitigation monitoring and reporting program, "*Cordova Business Center SIS/MND Mitigation Monitoring and Reporting Program*" (MMRP) for the changes made to the project and has incorporated all mitigation measures as conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program has been designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, the Town has incorporated mitigation measures into the MMRP.

(2) The Town is the custodian of the documents and other material that constitute the "*record of the proceedings*"[2] (the Record) upon which its decision is based. The Record shall be located at the following location:

Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307

[1] *REFERENCE: CEQA Chapter 2.6: General § 21080. Division Application to Discretionary Projects; Nonapplication; Negative Declarations; Environmental Impact Report Preparation*
[2] *REFERENCE: CEQA § 21081.6. FINDINGS OR NEGATIVE DECLARATIONS; REPORTING OR MONITORING PROJECT CHANGES; EFFECT ON ENVIRONMENT; CONDITIONS (A)(2)*

2 PUBLIC COMMENTS OF DRAFT SIS/MND AND RESPONSE

In accordance with CEQA Guidelines Section 15073[3], the Cordova Business Center Development Project Draft Subsequent Initial Study/Mitigated Negative Declaration (SIS/MND) was circulated for public review beginning on October 16, 2024 and ending on November 18, 2024. In response to the publication of the Draft SIS/MND for public review, comments were received by the Town of Apple Valley via email from members of the public. Although CEQA does not require written responses to comments on an Initial Study/Mitigated Negative Declaration, this document does include the comments received during the public comment period and provides responses from the Lead Agency that are incorporated into the Final SIS/MND. No new significant environmental impacts were identified during this process.

Copies of comments are included in Attachment 1. The comments received in five Letters and the Responses to their comments are itemized herewith corresponding to the itemization noted within the Letters received:
The following public comments received from the public address requests access to Documents Referenced in the SIS/MND and access to Public Records for the project and do not address specific items or adequacies of the IS/MND; therefore, formal responses are provided.

AJBC COMMENT EMAIL #1: Adams Broadwell Joseph & Cardozo dated 10/29/24
This Request was a PRA request for access to any and all public records referring or related to the Projects.
ABJC COMMENT EMAIL #1 RESPONSE:
The Town received follow up Letter #1 from requestor with same comment, below and fulfilled this request on 11/11/24. providing public record documentation as requested.

ABJC LETTER #1: Adams Broadwell Joseph & Cardozo Letter dated November 5, 2024.
AJBC LETTER # 3 COMMENT #1: This was a PRA follow up Request for access to any and all public records referring or related to the Projects.

ABJC LETTER #1 COMMENT #1 RESPONSE: The Town fulfilled this request on 11/11/24. providing public record documentation as requested.

ABJC LETTER #2: Adams Broadwell Joseph & Cardozo Letter dated 11/5/2024
ABJC LETTER#2 COMMENT #1: Request for access to documents referenced, incorporated by reference and relied upon in the Subsequent Mitigated Negative Declaration.

ABJC LETTER #2 COMMENT #1 RESPONSE: This request was made under CEQA, and the Town of

[3] *REFERENCE Section 15073. PUBLIC REVIEW OF A PROPOSED NEGATIVE DECLARATION OR MITIGATED NEGATIVE DECLARATION:*

Apple Valley fulfilled this request providing the referenced SIS/MND documentation and online links to documents as requested on 11/11/24.

LD LETTER #3: Lozeau Drury dated 11/14/2024

LD LETTER #3 COMMENT #1: Comments suggests non-specific inadequacies to address and mitigate the Project's environmental impacts and suggests an EIR be prepared for the project.

LD LETTER #3 COMMENT #1 RESPONSE: The Lead Agency disagrees with this comment. The Project has been evaluated in accordance with CEQA as set forth herein and as set forth in the SIS/MND. A comprehensive Mitigation Monitoring and Reporting Program has been prepared for the Project and shall be included in the Conditions of Approval. The Mitigation Monitoring and Reporting Program shall reduce any identified potential environmental impacts to a level of "*Less Than Significant with Mitigation Incorporated*". There is no indication, nor does the commenter point to any significant environmental impacts that have not been mitigated. Thus, preparation of an EIR is not required or needed.

BCH LETTER #4 Blum Collins Ho, dated 11/6/2024.**BCH LETTER #4: 2.0 Project Description - COMMENT #1**

Comment #1 states that [*the MND attempts to calculate and utilize a "pro-rata share" of the 2009 General Plan EIR Emissions assigned to the Project site as the applicable threshold for Air Quality, Energy, and GHG impacts. However, as noted above, this does not account for the substantial new information and applicable regulations that have materialized since certification of the 2009 General Plan EIR. Additionally, the 2009 General Plan EIR assumes new development construction at 22% building coverage of the site while the proposed project is constructed at 38% site coverage, which is nearly double the quantity analyzed for every site in the General Plan*. The Comment states [*this methodology is customized, erroneous and misleading and therefore an EIR is required*.]

BCH LETTER #4 RESPONSE TO 2.0 Project Description COMMENT #1:

As required under CEQA tiering the Project is analyzed for consistency with the analyses and conclusions in the GPEIR. The methodology used in the SIS/MND consistency analyses of the Project with the GPEIR is described in detail in the SIS/MND Section 1. Introduction. The analyses throughout the GPEIR document cover the entire General Plan Area as identified therein in acreage and square footage and separated by the defined General Plan land use categories. Appropriately, the potential environmental impacts under the buildout of the entire General Plan were analyzed for each land use category. The GPEIR Section III. Existing Conditions, Impacts, and Mitigation Measures include many tables that identify the Land Use Categories and their associated General Plan land areas. Potential environmental impacts are quantified within each land use category. Consequently, the only way to accurately compare the Project's potential impacts to the GPEIR potential impacts from which the SIS tiers, is to compare the Project with the baseline created by the GPEIR land use

category allocations. Therefore, a Project-pro-rata share allocation of the potential impacts identified in the GPEIR by land use category and within the applicable land use area is the necessary first step in performing the comparative analysis based on impacts and project demands. The basis and rationale for the pro-rata analysis is fully substantiated at SIS/MND Section 1.2.3 GPEIR Pro-Rata Project Allocation Comparative Analysis Methodology, as this is the only way to appropriately compare consistency with the General Plan EIR because of how the General plan analyzed impacts. The methodology is neither customized, erroneous nor misleading and performed appropriately and consistent with the methodology of the GPEIR analyses as required under "*tiering off the GPEIR*". In accordance with CEQA an EIR is not required.

BCH LETTER #4 - III. Air Quality, VI. Energy, and VIII. Greenhouse Gas Emissions COMMENT #2:
Comment that, "*The MND does not include for analysis relevant environmental justice issues in reviewing potential impacts, including cumulative impacts from the proposed project, and the environmental analysis that it tiers from also excludes this information. This is in conflict with CEQA Guidelines Section 15131 (c), which requires that "Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR."*

This comment then cites Demographic information, i.e., Census Tract population, ethnicity, income, poverty ratios and available medical care. The comment then states that the census tract is shown as highly burdened by pollution. Included in the census tract is ranking of percentile for solid waste facility impacts and their environmental effects.

BCH BLETTER #4 COMMENT #2 RESPONSE:
Urban Crossroads (UCR) the preparer of the AQ Assessment, GHG Assessment, Energy Assessment, Noise Analysis, Trip Generation Assessment, Vehicle Miles Traveled Assessment for the Project has analyzed the Comments listed above and the SWAPE analysis and comments. UCR has prepared a Memorandum, "*CORDOVA BUSINESS CENTER (APN 0463-491-09-0000) RESPONSE TO COMMENTS dated December 3, 2024* "(UCR Memorandum) included herewith in its entirety. Certain segments of the UCR Memorandum are cited herein in the following Responses:

The Project is within the adopted North Apple Valley Industrial Specific Plan (NAVISP) and has a designated land use of General Industrial. The Project's planned use of warehouse and distribution is an allowable use under the General Plan. The SIS tiers off the GPEIR.

Environmental justice is not an environmental impact required to be evaluated or considered pursuant to CEQA, per CEQA Guidelines Article 9. CEQA does not reference the term "environmental justice" and the State CEQA Guidelines does not require Census Tract Data analysis. CEQA focuses on whether a project may have "significant environmental impacts". The SIS/MND has been pre-

pared in accordance with State CEQA Guidelines, inclusive of site-specific technical studies as required under the GPEIR [Section III. Existing Conditions, Project Impacts and Mitigation Measures p. III-1.] As dictated by CEQA to adequately analyze reasonable and potential foreseeable significant environmental effects of the project, to address site specific potential impacts as required in the GPEIR Mitigation Measures and GPEIR Mitigation Monitoring and Reporting Program, site-specific Technical Studies for the proposed Project were performed as a part of the Subsequent Initial Study listed below:

- Air Quality Assessment (AQA),
- General Biological Resources Assessment (GBRA)/Aquatic Resources Assessment (ARA) and Cultural Resources Assessment (CRA)
- Archaeological Resources Inventory and Evaluation Report Paleontological and Tribal Resources
- Geology and Infiltration
- Greenhouse Gas Assessment,
- Energy Assessment
- Hydrology Study / Water Quality Management Plan
- Noise and Vibration Analysis
- Phase I Environmental Site Assessment
- Trip Generation Assessment & Vehicle Miles Traveled Analysis (VMT)
- Water, Sewer and Solid Waste Supply Assessment in accordance with SB 610 AND 221, Mojave Water Agency Urban Water Management Plan (MWAUWMP), Liberty Utilities Urban Water Management Plan (LUUWMP), Town of Apple Valley Sewer System Master Plan (TAVSSMP), and CalRecycle

While environmental justice is not required under CEQA, the Town of Apple Valley General Plan EIR does address population and housing in Section 3, subsection J, [page III-172]. Further, the air quality analysis contained in the SIS/MND XIV. Population/Housing demonstrates the Project would not result in environmental justice issues.

BCH LETTER #4 - III. Air Quality, VI. Energy, and VIII. Greenhouse Gas Emissions COMMENT #3
The comment then states that the State of California lists three approved compliance modeling software for non-residential buildings related to energy and states the CalEEMod modeling for the Project does not comply with the 2022 Building Energy Efficiency Standards and underreports the Project's energy impacts and fuel consumption.

The comment alludes to CEQA Guidelines provisions addressing circumstances requiring preparation of Subsequent EIRs and Negative Declarations (CEQA Guidelines Section 15162. Subsequent EIRs and Negative Declarations).

The comment states that the SIS/MND must include various discussions addressing numerous

California goals to reduce statewide GHG emissions.

The commenter disagrees with the SIS/MND pro-rata basis for analysis.

The commenter states that the SIS/MND "hides" information regarding the Project GHG emissions, and that the SIS/MND must employ the SCAQMD interim GHG emissions threshold of 3,000 MTCO2e/year.

The Comments include an analysis performed by SWAPE.

BCH LETTER #4 COMMENT #3 - III. Air Quality, VI. Energy, and VIII. Greenhouse Gas Emissions RESPONSE

The air quality analysis, "*Cordova Business Center Air Quality Assessment,* prepared by Urban Crossroads dated October 11, 2024" included in the FINAL SIS/MND APPENDIX 3 AQ, GHG & EA, for the Project does provide an assessment of potential cumulative air quality impacts. The UCR Memorandum (Response #1 page 3 para.1) states, *"The MDAQMD shares the responsibility with California Air Resources Board (CARB) for ensuring that all federal and state ambient air quality standards are achieved and maintained throughout the air basin. The MDAQMD has developed methodologies and thresholds of significance that are widely used throughout the air basin. The MDAQMD relies on methodology provided by the SCAQMD, whose staff has suggested in the cumulative significance methodologies contained in the CEQA Air Quality Handbook that the emissions-based thresholds be used to determine if a project's contribution to regional cumulative emissions is cumulatively considerable. These thresholds were used in the Air Quality Analysis to assess the significance of the Project specific and cumulative air quality impacts. Air quality impacts are basin-wide, and air quality is affected by all pollutant sources in the basin. As the individual Project thresholds are designed to help achieve attainment with cumulative basin-wide standards, they are also appropriate for assessing the Project's contribution to cumulative impacts.*"

UCR has determined that the compliance modeling software referenced by the commenter is used to confirm final design, with detailed information included in construction drawings, which is pursuant to Title 24 compliance. The final engineered design is performed with the construction drawings and are typically not prepared until *after* the Project is approved/entitled. The MND and underlying technical studies correctly utilize CalEEMod which estimates energy demand based on average intensity factors for similar land use types based on the site plans provided to the City for entitlement. UCR states the following in their Memorandum (Response #1, p.p. 3-4), "*Since the Project's tenant is unknown at this time, and information about the future tenant's energy use is not available at this time, it is appropriate to defer to the CalEEMod default assumptions which have been derived by the California Air Pollution Control Officers Association (CAPCOA) based on survey data. There is no requirement of the MND to show specific compliance with 2019 Building Energy Efficiency Standards at this time as that will be a requirement prior to issuance of a building permit and verified by the City Building and Safety Department.*

Note further that CEQA does not mandate that certain tools or modeling protocols be employed in environmental analysis such as is suggested by the commenter. CEQA requires only that analyses be sufficient to provide decision-makers with information enabling them to make decisions that intelligently account of environmental consequences of projects (CEQA Guidelines §15151. STANDARDS OF SIGNIFICANCE). Regarding air quality impact and related energy consumption modeling, the Project Subsequent Initial Study/Mitigated Negative Declaration (SIS/MND) and supporting technical analyses provide such sufficient information.
Additionally, the Lead Agency has historically and successfully employed CalEEMod for purposes of air quality modeling and related energy consumption analyses. It is the Lead Agency's independent judgement, based on extensive practical experience and professional expertise preparing and reviewing CEQA environmental documents, that CalEEMod accurately and appropriately integrates air quality and energy impact analyses.

Moreover, the energy modeling protocols cited by the commenter (CBECC-Com, EnergyPro, and IES VE) provide modeling of building energy consumption only, whereas CalEEMod comprehensively and cohesively provides building energy consumption estimates, as well as establishes the basis for estimating construction activity/construction equipment energy consumption, and mobile-source (vehicular) energy consumption. This latter category (vehicular energy consumption) comprises the majority of Project energy demand. If anything, the energy modeling protocols offered by the commenter (which do not consider energy consumption attributable to construction attributable to construction activities or mobile sources) would vastly underestimate the Project energy demands and Project energy consumption. The SIS/MND analysis accurately estimates the Project energy demands, and substantiates that all Project energy impacts would be less-than-significant."

The comment that alludes to CEQA Guidelines provisions addressing circumstances requiring preparation of Subsequent EIRs and Negative Declarations (CEQA Guidelines Section 15162. Subsequent EIRs and Negative Declarations) is false. CEQA states, "new information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available" is of relevance only to the extent that such information would result in new or substantially different impacts not considered and addressed in the original CEQA document(s). The SIS/MND tiers from the certified and adopted GPEIR pursuant to CEQA Guidelines as described earlier herein and, in the SIS/MND. All of the required additional site-specific technical studies and analyses have been performed and analyzed in accordance with CEQA. The SIS/MND fully complies with CEQA Guidelines Section 15162 provisions. As discussed in the SIS/MND, "*because the Project is within the scope of the 2009 GPEIR and consistent with the requirements of State CEQA Guidelines Section 15168(c), this Subsequent Initial Study has been prepared to examine the proposed Project to determine if the Project would result in any impacts greater than those previously analyzed. Based on the findings and conclusions of the Subsequent Initial Study, a Mitigated Negative Declaration has been prepared*" (SIS/MND, p. 15).

The Lead Agency disagrees with the comment that the SIS/MND must include various discussions addressing numerous California goals to reduce statewide GHG emissions. As correctly stated in the UCR Memorandum, (Response #1, page 5), *"Note first that the Lead Agency is not required 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 (CEQA Guidelines Section 15204 (a)). In this regard, GHG plan/policy/regulation consistency analysis presented at SIS/MND p.133 reflects the Lead Agency's independent judgement as to the appropriate level and scope of analysis required for this Project. Further, the SIS/MND appropriately concludes that because the Project GHG emissions impacts would be less-than-significant, the Project would be consistent with applicable GHG emissions reduction plans/polices/regulations (SIS/MND p.133). Additionally, the Project would not result in any GHG emissions impacts not already considered and addressed in the 2009 GPEIR (SIS/MND, pp. 131 – 134). This at face value substantiates Project support of, and compliance with state GHG emissions reduction plans/policies/goals."*

Although the commenter disagrees with the Pro-rata share basis for analysis, the Lead Agency appropriately applied this method. Response to 2.0 Project Description comments (herein) on this issue was thoroughly discussed and concluded that a Project-pro-rata share allocation of the potential impacts identified in the GPEIR by land use category and within the applicable land use area is the necessary first step in performing the comparative analysis based on impacts and project demands. The basis and rationale for the pro-rata analysis is fully substantiated at SIS/MND Section 1.2.3 GPEIR Pro-Rata Project Allocation Comparative Analysis Methodology, as this is the only way to appropriately compare consistency with the General Plan EIR because of how the General plan analyzed impacts.

The Lead Agency disagrees with the commenter's statement that the SIS/MND "hides" information regarding the Project GHG emissions, and that the SIS/MND must employ the SCAQMD interim GHG emissions threshold of 3,000 MTCO2e/year. First, the Project is not within the Southcoast Air Quality Management District's jurisdiction. The Project is within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). Exhibits to this effect are included in UCR'S Response To Comments Memorandum herein as Exhibit 1 and 2. The applicable thresholds are the thresholds established by the MDAQMD. As stated in the UCR Memo, "This is patently false as, the Project is located within the MDAQMD and not the SCAQMD jurisdiction as shown below on Exhibits 1 and 2. As such, usage of thresholds established by the SCAQMD is not required and SCAQMD has no jurisdiction over the Project." "Additionally, as verified by UCR, the Town of Apple Valley has not adopted its own numeric GHG emissions threshold (SIS/MND, p. 131, et. al). Basis for the SIS/MND GHG emissions threshold is fully substantiated at SIS/MND (pp. 131, 132)." Pursuant to CEQA Guidelines 15604.4, that a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. Per the *State of California Health and Safe Code (HSC) Division 26 Air Resources, Part 3. Air Pollution Control Districts Chapter 13. Mojave Desert Air Quality Management District, Article 4.*

General Powers and Duties, §41230 (a) The Mojave Desert district board shall adopt rules and regulations that are not in conflict with state and federal laws, rules, and regulations and that reflect the best available technological and administrative practices.
The Lead Agency relies on the MDAQMD thresholds. Findings and conclusions of the SIS/MND are not affected. Revision to the SIS/MND is not required.

BCH LETTER #4 SWAPE COMMENTS/RESPONSES
BCH Letter #4 includes comments from their consultant "SWAPE". Their comments are pertinent to BCH LETTER #4's Air Quality, VI. Energy, and VIII. Greenhouse Gas Emissions comments and therefore the SWAPE comments and Responses to their Comments are set forth as follows:

UCR has evaluated the SWAPE comments included in their Memorandum. The SWAPE Comments and the Responses are summarized as follows:
SWAPE COMMENT #1: *Unsubstantiated* Input Parameters Used to Estimate Project Emissions

The Comment addresses the CalEEMod software used for the project, identifies inconsistent model inputs that commenter states is inconsistent with the SIS/MND and states that an EIR should be prepared to include an updated air quality analysis that adequately evaluates the impact that construction of the Project will have on local and regional air quality.

SWAPE COMMENT #1 RESPONSE:
As explained in the UCR Memo, the Air Quality Analysis in the MND adequately evaluated and mitigated for air quality impacts of the Project. The AQA performed CalEEMod modeling of the Project appropriately using site specific data input for Construction equipment, including the required Tier 4 Diesel equipment required by the State, site specific Construction Schedules and duration of construction which information was analyzed and determined by the Development Consultants, Therefore, a revised MND is not required. Additionally, a Project specific HRA analysis was conducted which would result in a less than significant impact for cancer and non-cancer risk. Therefore, an EIR is not necessary.

SWAPE COMMENT #2: *Unsubstantiated Changes to Individual Construction Phase Lengths*
The Comment states that the SIS/MND fails to provide a sufficient source for the individual construction phase lengths.

SWAPE COMMENT #2 RESPONSE:
The commenter asserts that the MND understates the Project's construction and operational air pollutant emissions due to assumptions that are purported to be unsubstantiated. Specifically, the commenter questions the changes made to the defaults used in the Project analysis.

The changes to the modeling default Construction Schedule as stated in Comment #1 Response above are summarized and disclosed in the MND APPENDIX 3 AQA, GHG, EA, to assess both construction and operational impacts, using an estimated 12 months with identified construction

phases and durations from Site Preparation through Architectural Building Coating, and underlying air quality analysis which provides a detailed summary of the start and end dates of construction along with the number of working days of activity.

The commenter claims that changes have been made to the CalEEMod defaults and that these changes are not substantiated or identified in the MND. To the contrary, the SIS/MND and underlying AQ, GHG & EA Assessment clearly states on Page 9, of the Memorandum, "The duration of construction and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines." However, in this case, site-specific data input for Construction equipment, including the required Tier 4 Diesel equipment required by the State, site specific Construction Schedules and duration of construction which information was analyzed and determined by the Project Development Consultants was confirmed and reviewed by the Project Applicant relative to the Project's construction schedule and equipment. This data was used in the modeling as permitted in CalEEMod and provided a more accurate model.

SWAPE COMMENT #3: *Incorrect Application of Tier 4 Interim Engine Tiers*
The comment states that the SIS/MND fails to explicitly require Tier 4 Interim emissions standards through a formal mitigation measure.

SWAPE COMMENT #3 RESPONSE:
The California Air Resources Board (CARB) determined Tier 4 Diesel Engines are the cleanest of the four tiers.[4] The State of California Air Resources Board determined that effectively Tiers 0-3 are obsolete now as determined in accordance with the Amendment to the "In-Use Off Road Diesel Fueled Fleets Regulation as stated in the following excerpt, "*Emission stringency levels for the off-road sector engines are distinguished by the engine Tier, starting with Tier 0 being the dirtiest uncontrolled engine through the cleanest Tier 4 Final. The 2022 amendments target the phase-out of high-emitting Tier 0, 1, and 2 engines. Although these older engines only make up about one-third of the statewide fleet, they account for a consequential 60% of oxides of nitrogen emissions statewide. In fact, a single Tier 0 offroad engine has up to 80 times higher emissions per hour compared to a new Tier 4 Final engine.*"[5] Therefore, for all construction projects to use Tier 4 equipment. It is now standard practice, i.e., industry standard, for all construction projects to use Tier 4 equipment.

Because it is standard practice for this developer and most other developers, the requirement to use Tier 4 Final construction equipment is identified as a project design feature, not a mitigation measure. Although Project Design Features are already part of the Project, they will also be included as separate conditions of approval consistent with good practice identified by the Association of Environmental Professionals referenced in the comment. Inclusion of the Project Design Features in the Conditions of Approval and furthers their timely and monitored implementation. The Town of Apple Valley will monitor compliance through the COA.

[4] *REFERENCE: August 29, 2023 California Air Resources Board Fact Sheet: Added Vehicle Restrictions and Tier Phase-Out Requirements; California Environmental Protection Agency Air Resources Board, Tier 4 Regulations for Off-Road Diesel Engines and Equipment 12/9/2004*

It is therefore not a mitigation measure and there is no need to evaluate the effectiveness of the Project Design Feature.

SWAPE COMMENT #4: *Updated Analysis Indicates a Potentially Significant Air Quality Impact*
SWAPE performed their own modeling of the Project and indicate that the Project would result in a potentially significant air quality impact, which the DEIR fails to identify or address. Consequently, a revised EIR should be prepared to properly assess and mitigate the Project's potential air quality impact.

SWAPE COMMENT #4 RESPONSE:
The commenter attempts to provide updated modeling of the Project's construction-related emissions of VOC and NOX emissions based on CalEEMod defaults and not based on the information included in the SIS/MND. However, the commenter provides no substantial evidence to support the use of CalEEMod defaults when, as explained in SWAPE Response #3 above, the CalEEMod allows for Project Specific equipment and construction durations, which are more accurate and appropriate Project specific inputs available. To the contrary, Response to the Comments on page 22 above and in the *UCR Memorandum Response #4 (p.11),* which address the CalEEMod assumptions, refute the commenters assertions and support the fact that SIS/MND and supporting technical studies are correct, and no significant impact would occur from implementation of the Project, with adherence to regulatory requirements. As such, the analysis in the SIS/MND and supporting technical analysis is correct and no changes to the SIS/MND are needed.

SWAPE COMMENT #5: *Screening-Level Analysis Demonstrates Potentially Significant Health Risk Impact*

SWAPE commented that it performed its own health risk assessment and stated that their screening-level HRA suggests that the construction and operation of the Project could lead to potentially significant health risks. The comment states that an EIR should therefore be prepared, incorporating a more refined HRA that thoroughly and accurately assesses the health impacts associated with both the construction and operations phases of the Project.

SWAPE COMMENT #5 RESPONSE:
The UCR evaluation and analysis of the SWAPE HRA has determined that it contains several critical flaws. The commenter utilizes the AERSCREEN model which is not the most appropriate model for determining concentrations from construction or operational activity for risk calculation. AERSCREEN is limited in that it only produces a 1-hour ground level concentration – risk assessments should be based on an annual average concentration. The commenter attempts to adjust for this by applying a 10% conversion factor that is based on model documentation from 1992 which may no longer be relevant. SWAPE's emission factor calculation is severely flawed: SWAPE takes the total daily emissions and divides them over a 24-hour period – effectively assuming that construction occurs 24 hours per day 7 days per week. The Town of Apple Valley regulations prohibit construction from occurring 24 hours per day. This critical flaw, along with the afore-

mentioned errors, results in a significant overestimation of the potential risk estimates from construction activity.

As part of the response to comments, a construction and operational HRA has been prepared by UCR utilizing the appropriate AERMOD modeling software, which allows for calculation of annual average concentrations and allows for the geospatial placing of the source and receptors. The construction and operational HRA utilizes the durations identified in SWAPEs comment along with the emissions estimates and number of days identified by SWAPE. The primary difference in the emissions is they are now appropriately divided over an average 8-hour per day construction period versus the inappropriate 24-hour per day assumption from SWAPE. Use of an 8-hour per day construction period is based on substantial evidence established through the construction surveys that are the basis for the 8-hour per day operations for construction equipment in CalEEMod. Further, an 8-hour workday is a reasonable assumption of construction work based on a typical 40-hour work week; and is a recognized typical workday by MDAQMD and SCAQMD. The analysis assumes that each piece of anticipated construction equipment will operate for 8 hours per day which, in reality, already would overestimate construction emissions. For example, during grading operations, water trucks would not operate continuously for an 8-hour period but would instead be deployed as necessary– usually three to four times per day – to minimize fugitive dust. In fact, most pieces of equipment would likely operate for fewer hours per day than indicated in the IS/MND. Based on the screening-level construction and operational HRA calculations, the maximum estimated risk would be 0.19 in one million for construction, 0.21 in one million for operations, and 0.31 in one million for construction and operations, which are all less than the applicable threshold of 10 in one million. As such, no significant impact would occur and the SIS/MND finding of less than significant health risks is appropriate. It should be noted that the HRA was not required as a part of the SIS/MND but has been prepared for purposes of responding to these comments. See the full UCR's HRA report included herein which includes the risk calculation and AERMOD output files.

Lastly, a cumulative stacking of the construction health risks on top of the operational health risk impacts is not appropriate since the concentrations vary by location and the operational risk assessment is based on a separate 30-year exposure scenario consistent with applicable guidance. Notwithstanding that, even if the construction risk estimate of 0.19 in one million were added to the 0.21 in one million risk estimate, a total risk of 0.40 in one million could occur, which is still less than the applicable threshold of 10 in one million. As such, the findings in the SIS/MND and underlying technical studies are correct and no changes are required. Therefore, an EIR is not required.

SWAPE COMMENT #6: Feasible Mitigation Measures Available to Reduce Emissions
This comment states that the project would result in potentially significant AQ impacts that should be mitigated based on several mitigation measures provided by the commentor.

SWAPE COMMENT #6 RESPONSE:

This comment states that the project would result in potentially significant AQ impacts that should be mitigated based on several mitigation measures provided by the commentor. However, as indicated in the previous COMMENT #2 III. Air Quality, VI. Energy, and VIII. Greenhouse Gas Emissions RESPONSE 2, the project would have a less than significant impact on AQ, and therefore, mitigation would not be required for the project. Additionally, as discussed in the previous Responses to Comments #3 and #4, the changes to the construction schedule and construction equipment suggested by the commentor are not substantiated. The comment does not contain any information requiring further changes to the MND or requiring preparation of an EIR. No further response is warranted. END OF BCH SWAPE COMMENTS/RESPONSES

URBAN CROSSROADS

CORDOVA BUSINESS CENTER RESPONSE TO COMMENTS

MEMORANDUM

URBAN CROSSROADS

DATE: December, 3, 2024
TO: Adir Cohen
FROM: Haseeb Qureshi, Urban Crossroads
JOB NO: 15428 SWAPE RTC

CORDOVA BUSINESS CENTER (APNS 0463-491-09-000) RESPONSE TO COMMENTS

Urban Crossroads, Inc. is pleased to submit the following Response to Comments from Blum, Collins & Ho LLP and SWAPE dated November 13, 2024 and November 11, 2024, respectfully, on the Draft Mitigated Negative Declaration for the Cordova Business Center **(Project)**, which is generally located within the North Apple Valley Industrial Specific Plan (NAVISP) on the southwest corner of Central Avenue and Cordova Road in the Town of Apple Valley. The comments from SWAPE are restated in italics for reference below, with a corresponding response below each comment.

BLUM, COLLINS & HO LLP III. AIR QUALITY, VI. ENERGY, AND VIII. GREENHOUSE GAS EMISSIONS COMMENTS

COMMENT #1

The MND does not include for analysis relevant environmental justice issues in reviewing potential impacts, including cumulative impacts from the proposed project, and the environmental analysis that it tiers from also excludes this information. This is in conflict with CEQA Guidelines Section 15131 (c), which requires that "Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR. If information on these factors is not contained in the EIR, the information must be added to the record in some other manner to allow the agency to consider the factors in reaching a decision on the project." This is especially significant as the surrounding community is highly burdened by pollution. According to CalEnviroScreen 4.01, CalEPA's screening tool that ranks each census tract in the state for pollution and socioeconomic vulnerability, the proposed project's census tract (6071012101) is highly burdened by pollution. The surrounding community bears the impact of multiple sources of pollution and is more polluted than other census tracts in many pollution indicators measured by CalEnviroScreen. For example, the project census tract ranks in the 80th percentile for ozone burden and 60th percentile for traffic burdens. Ozone can cause lung irritation, inflammation, and worsening of existing chronic health conditions, even at low levels of exposure. Exhaust fumes contain toxic chemicals that can damage DNA, cause cancer, make breathing difficult, and cause low weight and premature births.

The census tract ranks in the 85th percentile for solid waste facility impacts. Solid waste facilities can expose people to hazardous chemicals, release toxic gases into the air (even after these facilites are closed), and chemicals can leach into soil around the facility and pose a health risk to nearby populations. The census tract also bears more impacts from cleanup sites than 52% of the state. Chemicals in the buildings, soil, or water at cleanup sites can move into nearby communities through the air or movement of water.

Further, the census tract is a diverse community including 22% Hispanic, 10% African-American, and 2% Asian-American residents, whom are especially vulnerable to the impacts of pollution. The community also has a high rate of poverty, meaning 53% of the households in the census tract have a total income before taxes that is less than the poverty level. Income can affect health when people cannot afford healthy living and working conditions, nutritious food and necessary medical care. Poor communities are often located in areas with high levels of pollution7. Poverty can cause stress that weakens the immune system and causes people to become ill from pollution8. Living in poverty is also an indication that residents may lack health insurance or access to medical care. Medical care is vital for this census tract as it ranks in the 89th percentile for incidence of cardiovascular disease and 88th percentile for incidence of asthma.

The State of California lists three approved compliance modeling softwares for non-residential buildings: CBECC-Com, EnergyPro, and IES VE. CalEEMod is not listed as an approved software. The CalEEMod modeling does not comply with the 2022 Building Energy Efficiency Standards and under-reports the project's significant Energy impacts and fuel consumption to the public and decision makers. Since the MND did not accurately or adequately model the energy impacts in compliance with Title 24, a finding of significance must be made. An EIR with modeling using one of the approved software types must be prepared and circulated for public review in order to adequately analyze the project's significant environmental impacts. This is vital as the MND utilizes CalEEMod as a source in its methodology and analysis, which is clearly not an approved software.

Additionally, the MND has not provided environmental analysis regarding all areas in which, "New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available." For example, the MND has not provided any analysis regarding AB 32 (2006)10/SB 32 (2016), implementing California's goals to reduce statewide greenhouse gas emissions to 40% below the 1990 level by 203011 and SB 35012 (2015) reducing them to 80% below 1990 levels by 2050. The MND has also not discussed SCAQMD's implementation of SB 32, which is a 3,000 MTCO2e annual emissions threshold for industrial development. The SCAQMD documentation provides substantial evidence that the thresholds are consistent with policy goals and GHG emissions reduction targets set by the state. Specifically, the thresholds were set at levels that capture 90% of the GHG emissions, consistent with EO S-3-0514 target of reducing GHGs to 80% below 1990 levels by 2050. The MND has also not discussed AB 1279's (2022) goal to achieve net zero greenhouse gas emissions by or before 2045 in California. The MND also excludes discussion and analysis of the Town's 2021 update to its Climate Action Plan. The MND has not discussed SCAG's Connect SoCal RTP/SCS that provides local plans for the Southern California region's shared climate goals through 2050. The MND must be revised to provide an environmental analysis regarding all areas that new information has become available in order to provide an adequate informational document.

The MND attempts to calculate and utilize a "pro-rata share" of the 2009 General Plan EIR Emissions assigned to the Project site as the applicable threshold for Air Quality, Energy, and GHG impacts. However, as noted above, this does not account for the substantial new information and applicable regulations that have materialized since certification of the 2009 General Plan EIR. Additionally, the the 2009 General Plan EIR assumes new development construction at 22% building coverage of the site while the proposed project is constructed at 38% site coverage, which is nearly double the quantity analyzed for every site in the General Plan. This further represents the flaws in the MND's completely customized and erroneous methodology that misleads the public and decision makers by presenting impacts that are artificially presented as less than significant. The MND excludes stating that the project will generate 5,198.14 MTCO2e, which is hidden in the GHG Appendix Table 9: Total Project GHG Emissions. The project's annual 5,198.14 MTCO2e exceeds the SCAQMD's threshold of 3,000 MTCO2e and results in a significant impact. An EIR must be prepared to include a finding of significance with Air Quality impact thresholds A and B, Energy impact thresholds A and B, and GHG impact thresholds A and B as the MND has not analyzed the project in accordance with all applicable legislation and quantified requirements and will generate 5,198.14 MTCO2e annually, which exceeds the SCAQMD's thresholds to meet statewide GHG reduction goals

RESPONSE #1

Environmental justice is not an environmental impact required to be evaluated or considered pursuant to CEQA, per CEQA Guidelines Article 9. Contents of Environmental Impact Reports, Sections 15120 to 15132. Nonetheless, the Town of Apple Valley General Plan EIR does address population and housing in Section 3, subsection J, page III-172 and additionally the air quality analysis contained in the MND demonstrates the Project would not result in environmental justice issues. The air quality analysis prepared for the Project provides an assessment of potential cumulative air quality impacts. The MDAQMD shares the responsibility with California Air Resources Board (CARB) for ensuring that all federal and state ambient air quality standards are achieved and maintained throughout the air basin. The MDAQMD has developed methodologies and thresholds of significance that are widely used throughout the air basin. The MDAQMD relies on methodology provided by the SCAQMD, whose staff has suggested in the cumulative significance methodologies contained in the CEQA Air Quality Handbook that the emissions-based thresholds be used to determine if a project's contribution to regional cumulative emissions is cumulatively considerable. These thresholds were used in the Air Quality Analysis to assess the significance of the Project specific and cumulative air quality impacts. Air quality impacts are basin-wide, and air quality is affected by all pollutant sources in the basin. As the individual Project thresholds are designed to help achieve attainment with cumulative basin-wide standards, they are also appropriate for assessing the Project's contribution to cumulative impacts.

The commenter states that the State of California lists three approved compliance modeling software for non-residential buildings related to energy. The commenter is correct that the three approved compliance models referenced are the three approved compliance methods specifically for Title 24 compliance, which would be required for any development project at the time of physical building construction (approximately 12-18 months after entitlement). The compliance modeling software that is referenced by the commenter is used to confirm final

design, with detailed information included in construction drawings, is Title 24 compliant. The final design, construction drawings are not available at this time and are not typically prepared until after the Project is approved/entitled. The MND and underlying technical studies correctly utilize CalEEMod which estimates energy demand based on average intensity factors for similar land use types based on the site plans provided to the City for entitlement. Since the Project's tenant is unknown at this time, and information about the future tenant's energy use is not available at this time, it is appropriate to defer to the CalEEMod default assumptions which have been derived by the California Air Pollution Control Officers Association (CAPCOA) based on survey data. There is no requirement of the MND to show specific compliance with 2019 Building Energy Efficiency Standards at this time as that will be a requirement prior to issuance of a building permit and verified by the City Building and Safety Department.

Note further that CEQA does not mandate that certain tools or modeling protocols be employed in environmental analysis such as is suggested by the commenter. CEQA requires only that analyses be sufficient to provide decision-makers with information enabling them to make decisions that intelligently account of environmental consequences of projects (CEQA Guidelines §15151. STANDARDS OF SIGNIFICANCE). Regarding air quality impact and related energy consumption modeling, the Project Subsequent Initial Study/Mitigated Negative Declaration (SIS/MND) and supporting technical analyses provide such sufficient information.

Additionally, the Lead Agency has historically and successfully employed CalEEMod for purposes of air quality modeling and related energy consumption analyses. It is the Lead Agency's independent judgement, based on extensive practical experience and professional expertise preparing and reviewing CEQA environmental documents, that CalEEMod accurately and appropriately integrates air quality and energy impact analyses.

Moreover, the energy modeling protocols cited by the commenter (CBECC-Com, EnergyPro, and IES VE) provide modeling of building energy consumption only, whereas CalEEMod comprehensively and cohesively provides building energy consumption estimates, as well as establishes the basis for estimating construction activity/construction equipment energy consumption, and mobile-source (vehicular) energy consumption. This latter category (vehicular energy consumption) comprises the majority of Project energy demand. If anything, the energy modeling protocols offered by the commenter (which do not consider energy consumption attributable to construction activities or mobile sources) would vastly underestimate the Project energy demands and Project energy consumption. The SIS/MND analysis accurately estimates the Project energy demands, and substantiates that all Project energy impacts would be less-than-significant.

The commenter alludes to CEQA Guidelines provisions addressing circumstances requiring preparation of Subsequent EIRs and Negative Declarations (CEQA Guidelines Section 15162. Subsequent EIRs and Negative Declarations). To be clear, "new information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available" is of relevance only to the extent that such information would result in new or substantially different impacts not considered and addressed in the original CEQA document(s). The SIS/MND that is the subject of these comments fully complies with CEQA Guidelines Section 15162 provisions. As discussed in the SIS/MND, "[b]ecause the Project is within

the scope of the [City of Apple Valley] 2009 GPEIR and consistent with the requirements of State CEQA Guidelines Section 15168(c), this Subsequent Initial Study has been prepared to examine the proposed Project to determine if the Project would result in any impacts greater than those previously analyzed. Based on the findings and conclusions of the Subsequent Initial Study, a Mitigated Negative Declaration has been prepared" (SIS/MND, p. 15).

The commenter states that the SIS/MND must include various discussions addressing numerous California goals to reduce statewide GHG emissions. The Lead Agency disagrees. Note first that the Lead Agency is not required 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 (CEQA Guidelines Section 15204 (a)). In this regard, GHG plan/policy/regulation consistency analysis presented at SIS/MND p.133 reflects the Lead Agency's independent judgement as to the appropriate level and scope of analysis required for this Project. Further, the SIS/MND appropriately concludes that because the Project GHG emissions impacts would be less-than-significant, the Project would be consistent with applicable GHG emissions reduction plans/polices/regulations (SIS/MND p.133). Additionally, the Project would not result in any GHG emissions impacts not already considered and addressed in the 2009 GPEIR (SIS/MND, pp. 131 – 134). This at face value substantiates Project support of, and compliance with state GHG emissions reduction plans/policies/goals.

The commenter disagrees with the SIS/MND pro-rata basis for analysis. The Lead Agency acknowledges this disagreement. In this regard, CEQA Guidelines § 15151. Standards for Adequacy of an EIR, provides the following:

> "An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure" [emphasis added].

Despite disagreement expressed by the commenter, the SIS/MND prepared for the Project including, but not limited to, the pro-rata analysis methodology are considered adequate, and complete, consequently the methodology and comparative analyses far exceeds a good faith effort at full disclosure of the Project's potential impacts. Moreover, because the GPEIR uses the land area of the General Plan and identifies the areas of each of the land use categories, the only way to accurately compare the Project's impacts is to compare with the baseline created by the GP EIR land use category allocations. Therefore, a Project-pro-rata share of the GPEIR land use category is the necessary first step in performing the comparative analysis based on impacts and project demands. The basis and rationale for the pro-rata analysis is fully substantiated at

SIS/MND Section 1.2.3 GPEIR Pro-Rata Project Allocation Comparative Analysis Methodology, as this is the only way to appropriately compare consistency with the General Plan EIR because of how the General plan analyzed impacts.

The commenter states that the SIS/MND "hides" information regarding the Project GHG emissions, and that the SIS/MND must employ the SCAQMD interim GHG emissions threshold of 3,000 MTCO2e/year. The Lead Agency disagrees. This is patently false as, the Project is located within the MDAQMD and not the SCAQMD jurisdiction as shown below on Exhibits 1 and 2. As such, usage of thresholds established by the SCAQMD is not required and SCAQMD has no jurisdiction over the Project. In fact, the Project is located within the MDAQMD and therefore the thresholds established by the MDAQMD have been utilized. Additionally, the Town of Apple Valley has not adopted its own numeric threshold (SIS/MD, p. 131, et. al). Basis for the SIS/MND GHG emissions threshold is fully substantiated at SIS/MND pp. 131, 132. Lead Agencies are not required to use statewide emissions reduction goals as thresholds of significance. Findings and conclusion of the SIS/MND are not affected. Revision to the SIS/MND is not required. Preparation of an EIR is not required.

EXHIBIT 1

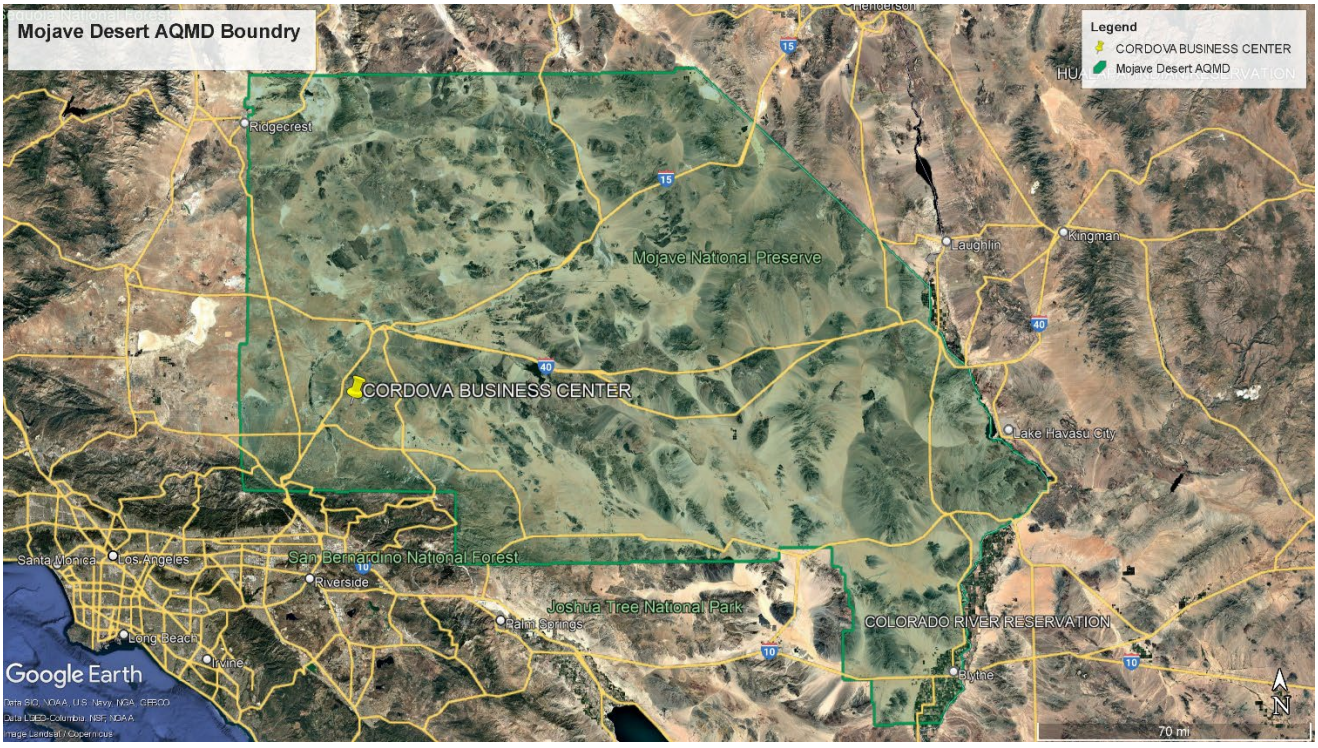
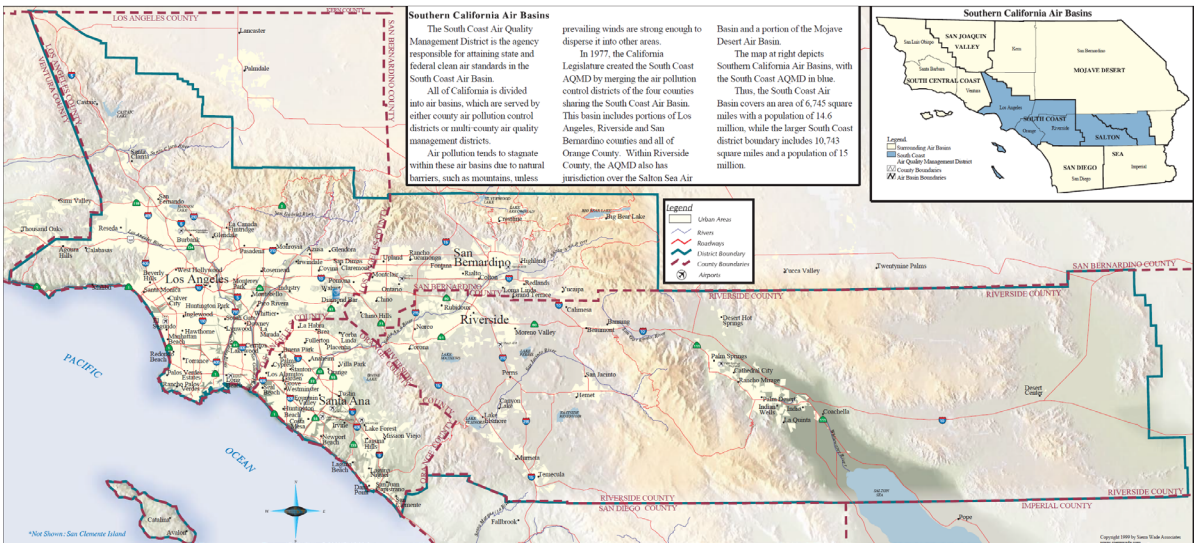


EXHIBIT 2

SOUTH COAST
AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765-4182 Information: 1-800-CUT-SMOG (1-800-288-7664) Internet: http://www.aqmd.gov



SWAPE COMMENTS

COMMENT #1

[SWAPE COMMENT #1]

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The SIS/MND's air quality analysis relies on emissions calculated with the California Emissions Estimator Model ("CalEEMod") Version 2022.1 (p. 55).1 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 the California Environmental Quality.

Act ("CEQA") requires that such changes be justified by substantial evidence.2 After entering all relevant data into the model, CalEEMod calculates the emissions from both construction and operational phases, producing "output files." These files outline the parameters used in the emissions calculations and highlight any modifications made to the default values, along with justifications for each change.

Upon review of the Project's CalEEMod output files, provided in the Air Quality, Greenhouse Gas, and Energy Analysis ("AQ & GHG Assessment") as Appendix 3.0 to the SIS/MND, we identified several model inputs that are inconsistent with the information presented in the SIS/MND. These discrepancies,

outlined below, suggest the Project's construction emissions may be underestimated. An EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction of the Project will have on local and regional air quality.

RESPONSE #1

As explained below, the Air Quality Analysis in the MND adequately evaluated and mitigated for air quality impacts of the Project, therefore a revised MND is not required. Additionally, a Project specific HRA analysis was conducted which would result in a less than significant impact for cancer and non-cancer risk.

COMMENT #2

[SWAPE COMMENT #2]

Unsubstantiated Changes to Individual Construction Phase Lengths

Review of the CalEEMod output files reveals that the "15428 - AV3PLC Cordova" model includes the following justification for changes to the default construction schedule (see excerpt below) (Appendix 3.0, pp. 84, 85).

Screen	Justification
Construction: Construction Phases	Schedule based on the 2025 Opening Year
Construction: Off-Road Equipment	Equipment based on information provided by the Applicant
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction
Operations: Vehicle Data	Trip characteristics based on information provided in the Trip Generation assessment.
Operations: Fleet Mix	Passenger Car Mix estimated based on CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, MCY). Truck Fleet Mix based on 2, 3 and 4 axle trucks.
Operations: Energy Use	Per client data, Project will not utilize natural gas.

The model includes the following construction schedule, including these changes (see excerpt below) (Appendix 3.0, pp. 72).

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/2/2024	1/29/2024	5.00	20.0	20
Grading	Grading	1/30/2024	4/22/2024	5.00	60.0	45
Building Construction	Building Construction	4/23/2024	11/3/2025	5.00	400	440
Paving	Paving	1/28/2025	11/3/2025	5.00	200	35
Architectural Coating	Architectural Coating	1/28/2025	11/3/2025	5.00	200	35

The CalEEMod User's Guide requires any changes to model defaults be justified. As shown above in the "User Changes to Default Data" table above, the justification provided for these changes is:

"Schedule based on the 2025 Opening Year" (Appendix 3.0, pp. 84).

Regarding the Project's anticipated construction duration, the SIS/MND states:

"For purposes of analysis, construction of Project is expected to commence in January 2024 and would last through November 2025. The construction schedule utilized in the analysis represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission

regulations becoming more stringent. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines (12)" (p. 57).

The SIS/MND and associated documents, however, remain unsubstantiated as the SIS/MND fails to provide a sufficient source for the individual construction phase lengths. While the SIS/MND substantiates the total construction duration and claims to employ a 'worst-case analysis,' the SIS/MND fails to mention the individual construction phase lengths. Until the individual phases are substantiated by the SIS/MND, the model should have included proportionately altered individual phase lengths that match the proposed construction duration of 22 months.

The construction emissions are improperly spread out over a longer period of time for some phases, but not for others. According to the CalEEMod User's Guide, each construction phase is associated with different emissions activities (see excerpt below).

Demolition involves removing buildings or structures.

Site Preparation involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.

Grading involves the cut and fill of land to ensure that the proper base and slope is created for the foundation.

Building Construction involves the construction of the foundation, structures and buildings.

Architectural Coating involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.

Paving involves the laying of concrete or asphalt such as in parking lots, roads, driveways, or sidewalks.

By altering and extending the construction phase lengths without proper justification, the model assumes there are a greater number of days to complete the construction activities required by the prolonged phases. There will be less construction activities required per day and fewer pollutants emitted per day as a result of the unsubstantiated changes. The model may, therefore, underestimate the peak daily emissions associated with construction and should not be relied upon to determine Project significance.

RESPONSE #2

The commenter asserts that the MND understates the Project's construction and operational air pollutant emissions due to assumptions that are purported to be unsubstantiated. Specifically, the commenter questions the changes made to the defaults used in the Project analysis.

The changes to the Construction Schedule are summarized and disclosed in the MND and underlying air quality analysis which provides a detailed summary of the start and end dates of construction along with the number of working days of activity.

The commenter claims that changes have been made to the CalEEMod defaults and that these changes are not substantiated or identified in the MND. To the contrary and as stated by the commentor, the IS/MND and underlying *AQ, GHG & EA Assessment* clearly states on Page 9, that "*The duration of construction and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines.*" In this case, site-specific information was confirmed and reviewed by the Project Applicant relative to the Project's construction schedule and equipment.

COMMENT #3

[SWAPE COMMENT #3]

Incorrect Application of Tier 4 Interim Engine Tiers

The AQ & GHG Assessment demonstrates that the "15428 - AV3PLC Cordova" model includes changes to the default off-road equipment engine tiers (see excerpt below) (pp. 84, 85).

Screen	Justification
Construction: Construction Phases	Schedule based on the 2025 Opening Year
Construction: Off-Road Equipment	Equipment based on information provided by the Applicant
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction
Operations: Vehicle Data	Trip characteristics based on information provided in the Trip Generation assessment.
Operations: Fleet Mix	Passenger Car Mix estimated based on CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, MCY). Truck Fleet Mix based on 2, 3 and 4 axle trucks.
Operations: Energy Use	Per client data, Project will not utilize natural gas.

The model assumes that the Project's off-road grading equipment fleet would meet Tier 4 Interim emissions standards (see excerpt below) (Appendix 3.0, pp. 72, 73).

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Interim	3.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Interim	12.0	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Tier 4 Interim	5.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	6.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Building Construction	Crawler Tractors	Diesel	Average	6.00	8.00	87.0	0.43
Paving	Pavers	Diesel	Average	4.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	4.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	4.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48

Additionally, the AQ & GHG Assessment asserts that:

> *"The Construction Contractor shall ensure that off-road diesel grading equipment rated at 150 horsepower (hp) or greater, complies with Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 4 off-road emissions standards or equivalent and shall ensure that all construction equipment is tuned and maintained in accordance with the manufacturer's specifications" (p. 10).*

The inclusion of more stringent emissions standards, however, remains unsubstantiated as the SIS/MND fails to discuss Tier 4 Interim engine tiers. The SIS/MND failure to explicitly require Tier 4 Interim emissions standards through a formal mitigation measure poses an issue as according to the Association of Environmental Professionals ("AEP") CEQA Portal Topic Paper on mitigation measures:

> *"While not 'mitigation', a good practice is to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP). Often the MMRP is all that accompanies building and construction plans through the permit process. If the design features are not listed as important to addressing an environmental impact, it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact" (emphasis added).*[6]

Because measures not formally included in the mitigation monitoring and reporting program ("MMRP") may be removed from the Project's design altogether, the model's assumption of Tier 4 Interim emissions standards is unsupported.

RESPONSE #3

It is now standard practice for all construction projects to use Tier 4 equipment. Because it is standard practice for this developer and most other developers, the requirement to use Tier 4 construction equipment is identified as a project design feature, not a mitigation measure. Although Project Design Features are already part of the Project, they will also be included as separate conditions of approval and included in the MMRP, consistent with good practice identified by the Association of Environmental Professionals referenced in the comment. Inclusion of the Project Design Features in the MMRP furthers their timely and monitored implementation. The Town of Apple Valley will monitor compliance through the MMRP.

It is therefore not a mitigation measure and there is no need to evaluate the effectiveness of the Project Design Feature.

Furthermore, many agencies have adopted policies that require the use of Tier 4 equipment during construction activities, including but not limited to the following agencies:

- City of Fontana[1]
- City of Perris[2]
- City of Redlands[3]
- County of Riverside[4]

COMMENT #4 [SWAPE COMMENT #4]

Updated Analysis Indicates a Potentially Significant Air Quality Impact

We prepared an updated CalEEMod model, utilizing Project-specific information provided by the AQ & GHG Assessment to more accurately assess the Project's air quality emissions. In our updated model, we omitted the unsubstantiated application of Tier 4 Interim mitigation values and proportionately altered the construction phase lengths to match the total construction duration of 22 months. 7

Our updated analysis estimates that the volatile organic compounds ("VOC") and nitrogen oxides ("NOx") emissions associated with Project construction exceed the applicable Mojave Desert Air Quality Management District ("MDAQMD") threshold of 137 pounds per day ("lbs/day"), as referenced by the SIS/MND (p. 58, Table III-2) (see table below).8

Model	Construction VOC (lbs/day)	Construction NO_x (lbs/day)
SIS/MND	19.9	81.9
SWAPE	158	156
% Increase	694%	91%
MDAQMD Threshold	**137**	**137**
Exceeds?	***Yes***	***Yes***

The Project's construction-related VOC and NOx emissions, as demonstrated above, increase by approximately 694% and 91%, which exceed the applicable MDAQMD significance threshold. SWAPE's updated modeling indicates that the Project would result in a potentially significant air quality impact,

[1] https://oag.ca.gov/system/files/attachments/press-docs/Final%20Signed%20Fontana%20Ordinance.pdf

[2] https://www.cityofperris.org/home/showpublisheddocument/15478/637999606610400000

[3] https://destinyhosted.com/agenda_publish.cfm?id=73352&mt=ALL&vl=true&get_month=2&get_year=2023&dsp=agm&seq=4608&rev=0&ag=346&ln=18824&nseq=4566&nrev=0&pseq=&prev=&vl=true#

[4] https://rivcocob.org/sites/g/files/aldnop311/files/migrated/wp-content-uploads-2020-01-Good-Neighbor-Policy-F-3-Final-Adopted.pdf

which the DEIR fails to identify or address. Consequently, a revised EIR is should be prepared to properly assess and mitigate the Project's potential air quality impact.

RESPONSE #4

The commenter attempts to provide updated modeling of the Project's construction-related emissions of VOC and NOX emissions based on CalEEMod defaults and not based on the information included in the IS/MND. However, the commenter provides no substantial evidence to support the use of CalEEMod defaults when, as explained above, there are more accurate and appropriate Project specific inputs available. To the contrary, Response to the Comments above, which address the CalEEMod assumptions, refute the commenters assertions and support the fact that the Draft EIR and supporting technical studies are correct, and no significant impact would occur from implementation of the Project, with adherence to regulatory requirements. As such, the analysis in the IS/MND and supporting technical analysis is correct and no changes to the IS/MND are needed.

COMMENT #5 [SWAPE COMMENT #5

Screening-Level Analysis Demonstrates Potentially Significant Health Risk Impact

We prepared a screening-level risk assessment using AERSCREEN, which is a screening level air quality dispersion model.[10] AERSCREEN uses a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is estimated using AERSCREEN, a more refined modeling approach should be conducted prior to approval of the Project.

We prepared a preliminary HRA of the Project's construction and operational health risk impact to residential sensitive receptors using the annual PM2.5 exhaust estimates from the "15428 - AV3PLC Cordova" model's output files, included in the AQ & GHG Assessment. Consistent with OEHHA's recommendations, we assumed residential exposure begins during the third trimester stage of life. The SIS/MND's construction CalEEMod emissions indicate that construction activities will generate approximately 819 pounds of diesel particulate matter ("DPM") over the 671-day construction period.11 The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project construction, we calculated an average DPM emission rate by the following equation:

$$\text{Emission Rate } \left(\frac{\text{grams}}{\text{second}}\right) = \frac{819.2 \text{ lbs}}{671 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3{,}600 \text{ seconds}} = 00.0000000000 \text{ gg/ss}$$

Using this equation, we estimated a construction emission rate of 0.00641 grams per second ("g/s"). Subtracting the 671-day construction period from the total residential duration of 30 years, we

assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 28.16 years. The SIS/MND's operational CalEEMod emissions indicate that operational activities will generate approximately 140 pounds of DPM per year throughout operation. Applying the same equation used to estimate the construction DPM rate, we estimated the following emission rate for Project operation:

$$\text{Emission Rate } \frac{\text{grams}}{\text{second}} = \frac{140 \text{ lbs}}{365 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3{,}600 \text{ seconds}} = 00.0000000000 \text{ gg/ss}$$

Using this equation, we estimated an operational emission rate of 0.00201 g/s. Construction and operation were simulated as a 30-acre rectangular area source in AERSCREEN, with approximate dimensions of 492- by 246-meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution. The population of the City of Apple Valley was obtained from U.S. 2023 Census data.[12]

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. U.S. Environmental Protection Agency ("U.S. EPA") guidance suggests that in screening procedures, the annualized average concentration of an air pollutant to be estimated by multiplying the single-hour concentration by 10%.[13] *According to the AERSCREEN output files the maximally exposed individual receptor would be located 250 meters from the Project site. The SIS/MND states that the nearest sensitive receptor is in actuality a residence located 1,800 feet, or approximately 550 meters, away from the Project site (p. 63). Consequently, the single-hour concentration estimated by AERSCREEN for Project construction is 0.9273 µg/m³ DPM at around 550 meters downwind.*

Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.00927 µg/m³ for Project construction at the nearest sensitive receptor. For Project operation, the single-hour concentration estimated by AERSCREEN is 0.2914 µg/m³ DPM at approximately 550 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.0391 µg/m³ for Project operation at the nearest sensitive receptor.[14]

We calculated the excess cancer risk to the nearest sensitive receptor using applicable HRA methodologies prescribed by OEHHA, as recommended by the South Coast Air Quality Management District ("SCAQMD") and adopted by the MDAQMD.[15] *Guidance from OEHHA and the California Air Resources Board ("CARB") recommends the use of a standard point estimate approach, including high- point estimate (i.e. 95th percentile) breathing rates and age sensitivity factors ("ASF") in order to account for the increased sensitivity to carcinogens during early-in-life*

exposure and accurately assess risk for susceptible subpopulations such as children. The residential exposure parameters, such as the daily breathing rates, exposure duration, ASFs, fraction of time at home, and exposure frequency used for the various age groups in our screening-level HRA are as follows:

Exposure Assumptions for Residential Individual Cancer Risk

Age Group	Breathing Rate (L/kg-day)[16]	Age Sensitivity Factor[17]	Exposure Duration (years)	Fraction of Time at Home[18]	Exposure Frequency (days/year)[19]	Exposure Time (hours/day)
3rd Trimester	361	10	0.25	1	350	24
Infant (0 - 2)	1090	10	2	1	350	24
Child (2 - 16)	572	3	14	1	350	24
Adult (16 - 30)	261	1	14	0.73	350	24

For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose for each age group. Once determined, contaminant dose is multiplied by the cancer potency factor in units of inverse dose expressed in milligrams per kilogram per day (mg/kg/day- 1) to derive the cancer risk estimate. To assess exposures, we used the following dose algorithm:

$$\text{Dose}_{\text{AIR,per age group}} = C_{air} \times EF \times \left[\frac{BR}{BW}\right] \times A \times CF$$

where:

Dose_{AIR} = dose by inhalation (mg/kg/day), per age group
C_{air} = concentration of contaminant in air (µg/m3)
EF = exposure frequency (number of days/365 days)
BR/BW = daily breathing rate normalized to body weight (L/kg/day)
A = inhalation absorption factor (default = 1)
CF = conversion factor (1x10-6, µg to mg, L to m3)

To calculate the overall cancer risk, we used the following equation for each appropriate age group:

$$\text{Cancer Risk}_{AIR} = \text{Dose}_{AIR} \times CPF \times ASF \times FAH \times \frac{ED}{AT}$$

where:

Dose_{AIR} = dose by inhalation (mg/kg/day), per age group
CPF = cancer potency factor, chemical-specific $(mg/kg/day)^{-1}$
ASF = age sensitivity factor, per age group
FAH = fraction of time at home, per age group (for residential receptors only)
ED = exposure duration (years)
AT = averaging time period over which exposure duration is averaged (always 70 years)

Consistent with the 671-day construction schedule, the annualized average concentration for construction was used for the entire third trimester of pregnancy (0.25 years) and the first 1.59 years of the infantile stage of life (0 – 2 years). The annual annualized average concentration for operation was used for the remainder of the 30-year exposure period, which makes up the latter 0.41 years of the infantile stage of life, as well as the entire child stage of life (2 – 16 years) and adult stage of life (16 – 30 years). The results of our calculations are shown in the table below.

The Maximally Exposed Individual at an Existing Residential Receptor

Age Group	**Emissions Source**	**Duration** (years)	**Concentration** (ug/m3)	**Cancer Risk**
3rd Trimester	Construction	0.25	0.0093	1.07E-07
	Construction	*1.59*	*0.0093*	*2.06E-06*
	Operation	*0.41*	*0.0391*	*2.25E-06*
Infant (0 - 2)	Total	2		4.30E-06
Child (2 - 16)	Operation	14	0.0391	1.02E-05
Adult (16 - 30)	Operation	14	0.0391	1.57E-06
Lifetime		**30**		**1.62E-05**

The excess cancer risks for the 3rd trimester of pregnancy, infants, children, and adults at the nearest sensitive receptor, over the course of Project construction and operation, are

approximately 0.107, 4.3, 10.2, and 1.57 in one million, respectively. The excess cancer risk over the course of the residential lifetime (30 years) is approximately 16.2 in one million. As such, the child and lifetime cancer risks exceed the MDAQMD threshold of 10 in one million, resulting in a potentially significant impact not previously addressed or identified in the SIS/MND.

The purpose of the screening-level HRA is to demonstrate the potential link between Project-generated emissions and adverse health risk impacts. According to the U.S. EPA: 20

"EPA's Exposure Assessment Guidelines recommend completing exposure assessments iteratively using a tiered approach to 'strike a balance between the costs of adding detail and refinement to an assessment and the benefits associated with that additional refinement' (U.S. EPA, 1992).

In other words, an assessment using basic tools (e.g., simple exposure calculations, default values, rules of thumb, conservative assumptions) can be conducted as the first phase (or tier) of the overall assessment (i.e., a screening-level assessment).

The exposure assessor or risk manager can then determine whether the results of the screening-level assessment warrant further evaluation through refinements of the input data and exposure assumptions or by using more advanced models."

Our screening-level HRA suggests that the construction and operation of the Project could lead to potentially significant health risks. An EIR should therefore be prepared, incorporating a more refined HRA that thoroughly and accurately assesses the health impacts associated with both the construction and operations phases of the Project. If this more detailed analysis also finds that the Project would result in significant health risks, appropriate mitigation measures, as outlined in the "Feasible Mitigation Measures Available to Reduce Emissions" section below, should be implemented to reduce Project- related particulate matter emissions.

RESPONSE #5

The commenter claims that a construction and operational HRA should be prepared and goes so far to attempt to prepare a screening-level HRA. The commenters screening-level HRA has several critical flaws. The commenter utilizes the AERSCREEN model which is not the most appropriate model for determining concentrations from construction or operational activity for risk calculation. AERSCREEN is limited in that it only produces a 1-hour ground level concentration – risk assessments should be based on an annual average concentration. The commenter attempts to adjust for this by applying a 10% conversion factor that is based on model documentation from 1992 which may no longer be relevant. Lastly, SWAPEs emission factor calculation is severely flawed: SWAPE takes the total daily emissions and divides them over a 24-hour period – effectively assuming that construction occurs 24 hours per day 7 days per week. The Town of Apple Valley regulations prohibit construction from occurring 24 hours per day. This critical flaw, along with

the aforementioned errors, results in a significant overestimation of the potential risk estimates from construction activity.

As part of the response to comments, a construction and operational HRA has been prepared by UCR utilizing the appropriate AERMOD modeling software, which allows for calculation of annual average concentrations and allows for the geospatial placing of the source and receptors. The construction and operational HRA utilizes the durations identified in SWAPEs comment along with the emissions estimates and number of days identified by SWAPE. The primary difference in the emissions is they are now appropriately divided over an average 8-hour per day construction period versus the inappropriate 24-hour per day assumption from SWAPE. Use of an 8-hour per day construction period is based on substantial evidence established through the construction surveys that are the basis for the 8-hour per day operations for construction equipment in CalEEMod. Further, an 8-hour workday is a reasonable assumption of construction work based on a typical 40-hour work week; and is a recognized typical workday by MDAQMD and SCAQMD. The analysis assumes that each piece of anticipated construction equipment will operate for 8 hours per day which, in reality, already would overestimate construction emissions. For example, during grading operations, water trucks would not operate continuously for an 8-hour period but would instead be deployed as necessary– usually three to four times per day – to minimize fugitive dust. In fact, most pieces of equipment would likely operate for fewer hours per day than indicated in the IS/MND. Based on the screening-level construction and operational HRA calculations, the maximum estimated risk would be 0.19 in one million for construction, 0.21 in one million for operations, and 0.31 in one million for construction and operations, which are all less than the applicable threshold of 10 in one million. As such, no significant impact would occur and the SIS/MND finding of less than significant health risks is appropriate. It should be noted that the HRA was not required as a part of the SIS/MND but has been prepared for purposes of responding to these comments. See the full HRA report which includes the risk calculation and AERMOD output files.

Lastly, a cumulative stacking of the construction health risks on top of the operational health risk impacts is not appropriate since the concentrations vary by location and the operational risk assessment is based on a separate 30-year exposure scenario consistent with applicable guidance. Notwithstanding that, even if the construction risk estimate of 0.19 in one million were added to the 0.21 in one million risk estimate, a total risk of 0.40 in one million could occur, which is still less than the applicable threshold of 10 in one million. As such, the findings in the SIS/MND and underlying technical studies are correct and no changes are required.

COMMENT #6 [SWAPE COMMENT #6]

Feasible Mitigation Measures Available to Reduce Emissions

Regarding the implementation of mitigation for proposed projects, CEQA Guidelines § 15096(g)(2) states:

"When an updated EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant

effect the project would have on the environment."

The SIS/MND is consequently required under CEQA to implement all feasible mitigation to reduce the Project's potential impacts. As demonstrated in the sections above, the Project would result in potentially significant air quality and health risk impacts that should be mitigated further.

To reduce the VOC emissions associated with Project construction, we recommend the SIS/MND consider incorporating the following mitigation measure from the CA DOJ:[21]

- Require the use of super compliant, low-VOC paints less than 10 g/L during the architectural coating construction phase and during Project maintenance.

Further mitigation used by other land use development projects to address VOC/ROG emissions is as follows: [22]

- Recycle leftover paint. Take any leftover paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
- Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
- For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain
- Use compliant low-VOC cleaning solvents to clean paint application equipment.
- Keep all paint- and solvent-laden rags in sealed containers to prevent VOC emissions.
- Contractors shall construct/build with materials that do not require painting and use pre- painted construction materials to the extent practicable.
- Use high-pressure/low-volume paint applicators with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.

Los Angeles County recommends:[23]

- If paints and coatings with VOC content of 0 grams/liter to less than 10 grams/liter cannot be utilized, the developer shall avoid application of architectural coatings during the peak smog season: July, August, and September.

While the Project is not located in Los Angeles County, the use of low-VOC paints would nonetheless decrease the Project's significant VOC emissions. As detailed in the sections above, the Project is anticipated to result in potentially significant construction-related emissions of NO_x and both construction and operational emissions of DPM. According to the U.S. EPA, NO_x emissions typically originate from sources such as internal combustion engines in motor vehicles, as well as fossil fuel-fired electric utility and industrial boilers.[24] OEHHA defines DPM as solid particles produced by exhaust from diesel engines in trucks, buses, trains, ships and

other equipment.[25]

To address these potential impacts, we recommend the Project Applicant consider incorporating several mitigation measures aimed at reducing NO_x and DPM emissions during both the construction and operational phases of the Project (see list below).

CARB recommends the following:[26]

- Ensure the cleanest possible construction practices and equipment are used. This includes eliminating the idling of diesel-powered equipment and providing the necessary infrastructure (e.g., electrical hookups) to support zero and near-zero equipment and tools.
- Implement, and plan accordingly for, the necessary infrastructure to support the zero and near- zero emission technology vehicles and equipment that will be operating on site. Necessary infrastructure may include the physical (e.g., needed footprint), energy, and fueling infrastructure for construction equipment, on-site vehicles and equipment, and medium-heavy and heavy-heavy duty trucks.
- Require all off-road diesel-powered equipment used during construction to be equipped with Tier 4 or cleaner engines, except for specialized construction equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits, such that, emission reductions achieved are equal to or exceed that of a Tier 4 engine.
- Require all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during project construction be battery powered.
- Require all heavy-duty trucks entering the construction site during the grading and building construction phases be model year 2014 or later. All heavy-duty haul trucks should also meet CARB's lowest optional low-oxides of nitrogen (NO_x) standard starting in the year 2022.
- Require all construction equipment and fleets to be in compliance with all current air quality regulations.
- Require tenants to use the cleanest technologies available, and to provide the necessary infrastructure to support zero-emission vehicles and equipment that will be operating on site.
- Require all loading/unloading docks and trailer spaces be equipped with electrical hookups for trucks with transport refrigeration units (TRU) or auxiliary power units.[27]
- Requiring all TRUs entering the project-site be plug-in capable.

Requiring all service equipment (e.g., yard hostlers, yard equipment, forklifts, and pallet

jacks) used within the project site to be zero-emission. This equipment is widely available and can be purchased using incentive funding from CARB's Clean Off-Road Equipment Voucher Incentive Project (CORE)

- Require future tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans.
- Require all heavy-duty trucks entering or on the project site to be zero-emission vehicles and be fully zero-emission. A list of commercially available zero-emission trucks can be obtained from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP). Additional incentive funds can be obtained from the Carl Moyer Program and Voucher Incentive Program.
- Restrict trucks and support equipment from idling longer than two minutes while on site.
- Require the installation of vegetative walls or other effective barriers that separate loading docks and people living or working nearby.

In addition to recommending similar mitigation as the above-mentioned measures from CARB, the CA DOJ suggests:[28]

- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Using electric-powered hand tools, forklifts, and pressure washers, and providing electrical hook ups to the power grid rather than use of diesel-fueled generators to supply their power.
- Designating an area in the construction site where electric-powered construction vehicles and equipment can charge.
- Limiting the amount of daily grading disturbance area.
- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.
- Keeping onsite and furnishing to the lead agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.
- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees.

- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.

The CalEEMod User's Guide confirms that the methods for mitigating DPM emissions include the use of "alternative fuel, electric equipment, diesel particulate filters, oxidation catalysts, newer tier engines, and dust suppression."29

The above discussion provides feasible mitigation measures, drawn from sources such as the CARB and the CA DOJ, to reduce Project-related VOC, NOx and DPM emissions. These measures present cost-effective options to integrate lower-emission design features into the Project, thereby reducing emissions during construction and operation. An EIR should be prepared that includes all feasible mitigation measures, alongside updated air quality and health risk analyses, to ensure the necessary actions are implemented to achieve the emission reductions to the maximum extent feasible.

RESPONSE #6

This comment states that the project would result in potentially significant AQ impacts that should be mitigated based on several mitigation measures provided by the commentor. However, as indicated in the previous Response to Comments, the project would have a less than significant impact on AQ, and therefore, mitigation would not be required for the project. Additionally, as mentioned previously, the changes to the construction schedule and construction equipment suggested by the commentor are not substantiated. The comment does not contain any information requiring further changes to the MND or requiring preparation of an EIR. No further response is warranted.

BCH LETTER #4 COMMENTS CON'T:

BCH LETTER #4 XI. Land Use and Planning COMMENT #1: The MND does not provide a consistency analysis with all land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

BCH LETTER #4 XI. Land Use and Planning COMMENT #1 RESPONSES:

The SIS/MND Section 1. Introduction specifically sets forth the fact the Project is consistent with the GPEIR inclusive of the NAVISP and in detail describes the consistency with the General Plan Land Use to which allows for tiering off the GPEIR [SIS/MND Section 1.2.1]. It also describes the relationship of the NAVISP to the GPEIR [SIS/MND Section 1.2] and describes the applicable NAVISP Development Standards that the Project is subject to [SIS/MND Section 1.2.2]. The following are their excerpts pulled from the Town of Apple Valley Climate Action Plan and GPEIR mitigation measures posed by the Commenter with the Responses to Comments note below each one:

COMMENT 1. ND-6. For projects within the North Apple Valley Industrial Specific Plan, develop employee housing within one mile of the industrial project. (Climate Action Plan)

RESPONSE 2, ND-6 Residential land use for employee housing is located within 1-mile from the project to the north at Langley Road as depicted on the Town of Apple Valley General Plan Land Use Map.

COMMENT 2. ND-7. Preserve trees occurring on-site either through in situ protection during and after construction, or through transplant and relocation within landscaped areas. (Climate Action Plan)

RESPONSE 2. N-7: Only one existing tree is located on site and is within an area that is designated as Natural Undisturbed Area". Said tree will remain and projected during construction in accordance with the SIS/MND Mitigation Measure BIO-3.

COMMENT 3. ND-10. Install bus stop(s) and secure scheduled transit service from Victor Valley Transit Authority. (Climate Action Plan)

RESPONSE 3. ND-10

The project is conditioned to be designed in accordance with the NAVISP Section III. Development Standards and Guidelines and Section IV. Infrastructure.

COMMENT 4. ND-14: Use passive solar design by orienting buildings and incorporating landscaping to maximize passive solar heating during the winter, and minimize solar heating during the summer. (Climate Action Plan)

COMMENT 4. RESPONSE ND-14

The Project is designed to be served with passive solar energy as described in the Conceptual Plans. Final Design of the roof mounted Solar System will be completed in the final Construction Documents. Nonetheless, the SIS/MND Section VI. Energy Table 6.5-EA Table 21: Net Annual

Operational Energy Demand Summary shows the Project Operational Demand is -2,757,344 less than the GPEIR Pro-Rata Allocation Energy Demand. The EA concluded that, "Based on the results of the EA comparative analysis the EA demonstrated that *"The Project would not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. As supported by the preceding analyses, Project operations would not result in the inefficient, wasteful, or unnecessary consumption of energy."*

COMMENT 5. Air Quality Element Program 1.A.1: Apple Valley shall adhere to existing and future greenhouse gas and global warming rules, regulations, and requirements to monitor and reduce emissions.

COMMENT 6. Air Quality Element Policy 1.B: The Town shall proactively regulate local pollutant emitters by coordinating and cooperating with local, regional and federal efforts to monitor, manage and decrease the levels of major pollutants affecting the Town and region, with particular emphasis on PM10 and ozone emissions, as well as other emissions associated with diesel fueled equipment and motor vehicles.

COMMENTS 5. Air Quality Element Program 1.A.1: & 6. Air Quality Element Policy 1.B RESPONSES:
An Air Quality Assessment was prepared for the Project pursuant to all applicable local, state and federal regulations pursuant to the GPEIR mitigation measures. As stated in the SIS/MND Section VI. Energy, the proposed Project will not conflict with any applicable local or state plans. The Project proposes warehouse and distribution, which are "permitted" land uses consistent with the land use analyzed under the GPEIR. Conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs is proposed for the Project. The analyses in the EA demonstrate that the Project will have a surplus of the GPEIR Project Pro Rata Energy Demand Allocation and does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other industrial land use projects of similar scale and configuration. The proposed project must comply with the most current Building Energy Efficiency Standards, including the California Code of Regulations (CCR) Title 13 & Title 24, Part 11: California Green Building Standards. The Energy Assessment for the proposed Project demonstrated that the construction and operation of Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources and would not conflict with or obstruct a State or local plan for energy efficiency. Impacts would be less than significant. The Project will be in compliance with all applicable CCR Titles including but not limited to Title 13 and Title 24 standards ensuring that Project energy demands will not be inefficient, wasteful, or otherwise unnecessary.

Relative to diesel fueled equipment, as stated previously in BCH Letter SWAPE Comment #3 Response, "The California Air Resources Board (CARB) determined Tier 4 Diesel Engines are the

cleanest of the four tiers.[5] It is now standard practice, i.e., industry standard, for all construction projects to use Tier 4 equipment as described in the foregoing SWAPE Response to COMMENT #3 herein, pursuant to CARB Regulations.[6] The State of California Air Resources Board determined that effectively Tiers 0-3 are obsolete now as determined in accordance with the Amendment to the "In-Use Off Road Diesel Fueled Fleets Regulation as stated in the following excerpt, "*Emission stringency levels for the off-road sector engines are distinguished by the engine Tier, starting with Tier 0 being the dirtiest uncontrolled engine through the cleanest Tier 4 Final. The 2022 amendments target the phase-out of high-emitting Tier 0, 1, and 2 engines. Although these older engines only make up about one-third of the statewide fleet, they account for a consequential 60% of oxides of nitrogen emissions statewide. In fact, a single Tier 0 offroad engine has up to 80 times higher emissions per hour compared to a new Tier 4 Final engine.*"

Because it is standard practice for this developer and most other developers, the requirement to use Tier 4 Final construction equipment is identified as a project design feature, not a mitigation measure. Although Project Design Features are already part of the Project, they will also be included as separate conditions of approval consistent with good practice identified by the Association of Environmental Professionals referenced in the comment. Inclusion of the Project Design Features in the Conditions of Approval and furthers their timely and monitored implementation. The Town of Apple Valley will monitor compliance through the COA."

COMMENT 7. Circulation Element Program 1.A.4: The Town shall require that all intersections maintain a Level of Service D during both the morning and evening peak hour.
COMMENT 7. RESPONSE: The GPEIR inclusive of the 2017 GPEIR Addendum determined that at buildout all intersections will maintain a level of service of D or better during both the morning and evening peak hour.

COMMENT #7 CON'T: The MND has not provided any information or analysis on the buildout conditions of the General Plan or the North Apple Valley Industrial Specific Plan (NAVISP
COMMENT #7 CON'T RESPONSE:
The comment refers to the NAVISP EIR. The SIS/MND Section 1. Introductions does in fact sets forth the relationship between the GPEIR and the NAVISP, and discusses the chronology of the 2006 NAVISP EIR, the 2009 GPEIR that included the two Annexation Areas which subsequently the NAVISP Area Boundary was expanded to include the Annexation Areas, discusses the Relevance of the Town Land Annexations and NAVISP Amendments to the SIS. The SIS includes an Analysis

[5] *REFERENCE: August 29, 2023 California Air Resources Board Fact Sheet: Added Vehicle Restrictions and Tier Phase-Out Requirements; California Environmental Protection Agency Air Resources Board, Tier 4 Regulations for Off-Road Diesel Engines and Equipment 12/9/2004*
[6] The State of California Air Resources Board determined that effectively Tiers 0-3 are obsolete now as determined in accordance with the Amendment to the "In-Use Off Road Diesel Fueled Fleets Regulation as stated in the following excerpt, "*Emission stringency levels for the off-road sector engines are distinguished by the engine Tier, starting with Tier 0 being the dirtiest uncontrolled engine through the cleanest Tier 4 Final. The 2022 amendments target the phase-out of high-emitting Tier 0, 1, and 2 engines. Although these older engines only make up about one-third of the statewide fleet, they account for a consequential 60% of oxides of nitrogen emissions statewide. In fact, a single Tier 0 offroad engine has up to 80 times higher emissions per hour compared to a new Tier 4 Final engine.*"[5] Therefore, for all construction projects to use Tier 4 equipment.

of the 2009 Comprehensive General Plan. The SIS discussed that the NAVISP was amended to include Ordinances pursuant to the Town's Resolutions Amending the General Plan Land Use Policy Map, the Zone Change Amending the Official Zoning Map and the Specific Plan Amendment that absorbed the Annexation Area. Further, the SIS discussed the "Reliance on the NAVISP Requirements & Relationship to the Development Code". The SIS/MND Section 1.2.2 Analysis of the 2009 Comprehensive General Plan, subsection *Reliance on the NAVISP Requirements & Relationship to the Development Code* (p.15-par.2) states, "Because the Project is within the scope of the 2009 GPEIR and consistent with the requirements of State CEQA Guidelines Section 15168(c), this Subsequent Initial Study has been prepared to examine the proposed Project to determine if the Project would result in any impacts greater than those previously analyzed. Based on the findings and conclusions of the Subsequent Initial Study, a Mitigated Negative Declaration has been prepared."[7]

Throughout this Subsequent Initial Study, comparative consistency analyses are made with respect to the proposed Project's consistency with the GPEIR. There are also references to consistency with the NAVISP document itself. However, the analysis does not tier from nor refer to the separately prepared 2006 NAVISP EIR. This Subsequent Initial Study tiers off the GPEIR and also, where applicable to the CEQA Checklist, compares consistency with the requirements of the NAVISP Development Standards."

Section 1.2.3 GPEIR Pro-Rata Project Allocation Comparative Analysis Methodology thoroughly sets forth the Basis of the Methodology. This comment is addressed earlier in Comment 2.0 Project Description and restated here:

The analyses throughout the GPEIR document cover the entire General Plan Area as identified therein in acreage and square footage and separated by the defined General Plan land use categories. Appropriately the potential environmental impacts under the buildout of the entire General Plan were analyzed for each land use category. The GPEIR Section III. Existing Conditions, Impacts, and Mitigation Measures include many tables that identify the Land Use Categories and their associated General Plan land areas. Potential environmental impacts are quantified within each land use category. Consequently, the only way to accurately compare the Project's potential impacts to the GPEIR potential impacts from which the SIS tiers, is to compare the project with the baseline created by the GPEIR land use category allocations. Therefore, a Project-pro-rata share allocation of the potential impacts identified in the GPEIR by land use category and within the applicable land use area is the necessary first step in performing the comparative analysis based on impacts and project demands. The basis and rationale for the pro-rata analysis is fully substantiated at SIS/MND Section 1.2.3 GPEIR Pro-Rata Project Allocation Comparative Analysis Methodology, as this is the only way to appropriately compare consistency with the General Plan EIR because of how the General plan analyzed impacts.

[7] *REFERENCE: Town of Apple Valley California Code of Regulations Title 14. Natural Resources Agency Chapter 3. Guidelines for Implementation of the California Environmental Quality Act (CEQA) as amended December 28, 2018, Article 11. §15168 PROGRAM EIR*

The Lead Agency disagrees with the commenter regarding GPEIR Table III-41Preferred Alternative General Plan Land Use Designation Build Out Summary as this was part of the Alternatives Analysis and not applicable to the Adopted General Plan. The SIS/MND does in fact demonstrate through the Methodology of the GPEIR Project Pro-Rata Share Allocation that calculates the Project's share of the Buildout which was at 22%. The applicable Demand Analyses calculates the Project Demands at the Project allowable 38% and conservatively compares the demand to the Project Allocated Pro-rata amount. In all cases the Project is below the GPEIR Project Pro-rata Allocation demands. Therefore, the commenters' assumptions and comments are inaccurate and inconsistent with the GPEIR basins of analysis use throughout the GPEIR.

BCH LETTER #4 XIV. Population and Housing COMMENT #1
The MND does not provide the methodology for this calculation to determine the quantity of employees.
BCH LETTER #4 XIV. Population and Housing COMMENT #1 RESPONSE:
The Project Conceptual Plans include a floor plan inclusive of Office areas. These areas are sized based on the overall land use of warehouse and distribution as described in the SIS. CEQA does not require employee calculations but the necessary project utility service demands for Water and Sewer are based on number of employees which were included in the SIS. Therefore, an EIR is not necessary for calculating the number of employees. A Trip Generation Assessment and a Vehicle Miles Traveled Analysis was prepared for the project in accordance with applicable standards. In accordance with CEQA Guidelines, the SIS tiers off the General Plan and as such has been analyzed accordingly with Site Specific Technical Studies for that which is required under the GPEIR Mitigation Measures. The project is within the scope of the adopted Comprehensive General Plan and within the NAVISP.

BCH LETTER #4 XVII. Transportation BCH LETTER #4 XVII. Transportation COMMENT #1: The comment disagrees with the methodology of the comparative analysis to the 2009 GPEIR General Plan Area. Further the comment has an erroneous comparison of the GPEIR General Plan Area at buildout of 22% with the Project area of 38%.

BCH LETTER #4 XVII. Transportation COMMENT #1 RESPONSE 1: The methodology is explained in detail in the foregoing 2.0 Project Description Response to Comment. The MND does not create a customized nor erroneous methodology and does not mislead the public nor decision makers. The methodology stems from the GPEIR from which the SIS tiers as explained herein. Both a site-specific Trip Generation Assessment (TGA) as required under the GPEIR Mitigation Measures, and a Vehicle Miles Traveled Assessment (VMT) as required under CEQA, were prepared for the Project. The results were then appropriately compared to the GPEIR Project Pro-Rata share Allocation. The Town has had a NAVISP Transportation Development Impact Fee Analysis Pro-Rata Share Analysis prepared by Urban Crossroads that determines the Pro-Rata Share for all projects within the NAVISP area. The Project's Transportation Development Impact Fee Pro-Rata Share is included in the Transportation Mitigation Measures as GPEIR TRA-18 and shall be paid as

a Condition of Approval.

BCH LETTER #4 XXI. Mandatory Findings of Significance (MFS)

BCH LETTER #4 XXI. MFS COMMENT #1

MND has not provided an adequate or accurate cumulative analysis discussion here to demonstrate the impact of the proposed project in a cumulative setting. The MND has not provided any information or analysis on the buildout conditions of the General Plan or the North Apple Valley Industrial Specific Plan (NAVISP).

BCH LETTER #4 XXI. MFS COMMENT #1 RESPONSE 1:

The Lead Agency does not agree. See Comments and Responses in XI. Land Use and Planning that addresses this. The SIS was prepared in accordance with CEQA Guidelines Appendix G which requires analyses in a cumulative setting. These Responses to the repetitive Comments in the BCH LETTER #4 that include numerous discussions of the analyses conducted in the GPEIR relative to the buildout condition of both the General Plan and the NAVISP. The proposed Project is located within an adopted General Plan Area that has a certified EIR, "***Town of Apple Valley General Plan and Annexation Areas 2008-001 and 2008-002 Environmental Impact Report***" under which is the adopted North Apple Valley Industrial Specific Plan. The Project proposed industrial land uses of warehouse and distribution are consistent with the designated land uses under the NAVISP and (Permitted uses". Both the General Plan EIR and NAVISP (AMENDED Ord. 351 and 428) thoroughly analyzed cumulative impacts which have mitigation measures that render any significant impacts to less than significant with mitigation incorporated. This Initial Study includes supplemental site-specific Environmental Studies and Analyses that also render any significant impacts to less than significant with mitigation incorporated. These studies have also analyzed any potential cumulative impacts that did not identify any cumulative affects which is discussed in the SIS/MND Section Mandatory Findings of Significance. The NAVISP area surrounding the proposed site are predominantly vacant. Any proposed projects within the NAVISP Area are subject to the Town of Apple Valley NAVISP and Municipal Code requirements, and any required state and federal permits. Based on the results of the analyses performed ***there are no cumulative effects identified.***

End of BCH COMMENTS AND RESPONSES

GSEJA LETTER #5 Golden State Environmental Justice Alliance, dated December 6, 2024

This Letter is a withdrawal of BCH Letter#4 on behalf of GSEJA. GSEJA withdrew its letter, appeal, and/or opposition on/to the Project stating the Project's developer has addressed GSEJA's concerns about environmental mitigation. See Attachment 1 Comments Received.

End of GSEJA COMMENTS AND NO RESPONSE

3 TEXT CHANGES

4.1 TITLE PAGE:

- "DRAFT" changed to "FINAL";
- Date changed from October 2024 to December 2024
- State Clearinghouse No. 2024100839 added;

4.2 Document Header:

- "DRAFT" changed to "FINAL";
- State Clearinghouse No. 2024100839 added;

[INTENTIONALLY LEFT BLANK]

ATTACHMENT 1

COMMENTS RECEIVED

ADAMS BROADWELL JOSEPH & CARDOZO LETTER #1
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
601 GATEWAY BOULEVARD, SUITE 1000
SOUTH SAN FRANCISCO, CA 94080-7037
TEL: (650) 589-1660
FAX: (650) 589-5062
ssannadan@adamsbroadwell.com

SACRAMENTO OFFICE
520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4721
TEL: (916) 444-6201
FAX: (916) 444-6209

KEVIN T. CARMICHAEL
CHRISTINA M. CARO
THOMAS A. ENSLOW
KELILAH D. FEDERMAN
RICHARD M. FRANCO
ANDREW J. GRAF
TANYA A. GULESSERIAN
DARION N. JOHNSTON
RACHAEL E. KOSS
AIDAN P. MARSHALL
TARA C. RENGIFO

Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

November 5, 2024

VIA EMAIL AND U.S. MAIL

Daniel Alcayaga, AICP, Planning Manager
Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307
Email: dalcayaga@applevalley.org; planning@applevalley.org

La Vonda M. Pearson, Town Clerk
Town of Apple Valley
14955 Dale Evans Pkwy
Apple Valley, CA 92307
Email: townclerk@applevalley.org

VIA EMAIL ONLY

Richard Hirsch, Contract Planner
Email: rhirsch@interwestgrp.com

Public Records Act Coordinator
Email: records@applevalley.org

Re: **Request for Immediate Access to Public Records – Cordova Business Center Development Project (SCH No. 2024100839; Project No. SPR 2023-006)**

Dear Mr. Alcayaga, Ms. Pearson, Mr. Hirsch, and Public Records Act Coordinator:

We are writing on behalf of Californians Allied for a Responsible Economy ("CARE CA") to request ***immediate access*** to any and all public records referring or related to the Cordova Business Center Development Project (SCH No. 2024100839; Project No. SPR 2023-006), proposed by Cordova Business Center LLC ("Applicant"). This request includes, but is not limited to, any and all file materials, applications, correspondence, resolutions, memos, notes, analysis, email messages, files, maps, charts, and any other documents related to the Project. *This request does not include the Subsequent MND ("SMND") or documents referenced or relied upon in the SMND, which we have requested in a separate letter pursuant to the California Environmental Quality Act.* [COMMENT #1]

The Project proposes to construct a 504,508 square foot industrial warehouse and distribution center on one parcel (Assessor Parcel Number 0463-491-0000) consisting of approximately 30 acres located within the North Apple Valley Industrial Specific Plan area on the southwest corner of Cordova and Central Roads, in the Town of Apple Valley, County of San Bernardino, California.

This request is made pursuant to the California Public Records Act (Government Code §§ 7920.000, et seq.). This request is also made pursuant to Article I, section 3(b) of the California Constitution, which provides a Constitutional right of access to information concerning the conduct of government. Article I, section 3(b) provides that any statutory right to information shall be broadly construed to provide the greatest access to government information and further requires that any statute that limits the right of access to information shall be narrowly construed. [COMMENT #1 CON'T]

We request ***immediate access*** to review the above documents pursuant to section 7922.525 of the Public Records Act, which requires public records to be "open to inspection at all times during the office hours of a state or local agency" and provides that "every person has a right to inspect any public record." Therefore, the 10-day response period applicable to a "request for a copy of records" under Section 7922.535(a) does not apply to this request. [COMMENT #1 CON'T]

We request access to the above records in their original form, as maintained by the agency. Pursuant to Government Code Section 7922.570, if the requested documents are in electronic format, please upload them to a file hosting program such as Dropbox, NextRequest or a similar program. Alternatively, if the electronic documents are 10 MB or less (or can be easily broken into sections of 10 MB or less), they may be emailed to me as attachments. [COMMENT #1 CON'T]

We will pay for any direct costs of duplication associated with filling this request up to $200. However, please contact me at (650) 589-1660 with a cost estimate before copying/scanning the materials.

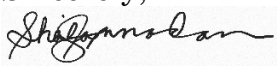
Please use the following contact information for all correspondence:

U.S. Mail
Sheila M. Sannadan
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080-7037

Email
ssannadan@adamsbroadwell.com

If you have any questions, please call me at (650) 589-1660 or email me at ssannadan@adamsbroadwell.com. Thank you for your assistance with this matter.

Sincerely,



Sheila M. Sannadan
Legal Assistant

SMS:acp

ADAMS BROADWELL JOSEPH & CARDOZO LETTER #2
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
601 GATEWAY BOULEVARD, SUITE 1000
SOUTH SAN FRANCISCO, CA 94080-7037
TEL: (650) 589-1660
FAX: (650) 589-5062
ssannadan@adamsbroadwell.com

SACRAMENTO OFFICE
520 CAPITOL MALL, SUITE 350
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Of Counsel
MARC D. JOSEPH
DANIEL L. CARDOZO

November 5, 2024

VIA EMAIL AND U.S. MAIL

Daniel Alcayaga, AICP, Planning Manager
Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307
Email: dalcayaga@applevalley.org; planning@applevalley.org

La Vonda M. Pearson, Town Clerk
Town of Apple Valley
14955 Dale Evans Pkwy
Apple Valley, CA 92307
Email: townclerk@applevalley.org

VIA EMAIL ONLY

Richard Hirsch, Contract Planner
Email: rhirsch@interwestgrp.com

Re: Request for Immediate Access to Documents Referenced in the Subsequent MND – Cordova Business Center Development Project (SCH No. 2024100839; Project No. SPR 2023-006)

Dear Mr. Alcayaga, Ms. Pearson, and Mr. Hirsch:

We are writing on behalf of Californians Allied for a Responsible Economy ("CARE CA") to request ***immediate access*** to any and all documents referenced, incorporated by reference, and relied upon in the Subsequent Mitigated Negative Declaration ("SMND") prepared for the Cordova Business Center Development Project (SCH No. 2024100839; Project No. SPR 2023-006), proposed by Cordova Business Center LLC ("Applicant"). *This request excludes a copy of the SMND. This request also excludes any documents that are currently available on the Town of Apple Valley website, as of today's date*.[1] [Comment #1]

The Project proposes to construct a 504,508 square foot industrial warehouse and distribution center on one parcel (Assessor Parcel Number 0463-491-0000) consisting of approximately 30 acres located within the North Apple Valley Industrial Specific Plan area on the southwest corner of Cordova and Central Roads, in the Town of Apple Valley, County of San Bernardino, California.

[1] Accessed https://www.applevalley.org/services/planning-division/environmental on November 5, 2024.

Our request for ***immediate access*** to all documents referenced in the SMND is made pursuant to the California Environmental Quality Act ("CEQA"), which requires that all documents referenced, incorporated by reference, and relied upon in an environmental review document be made available to the public for the entire comment period.[2] [Comment #1 Con't]

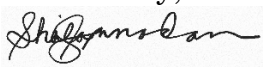
Please use the following contact information for all correspondence:

U.S. Mail
Sheila M. Sannadan
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080-7037

Email
ssannadan@adamsbroadwell.com

If you have any questions, please call me at (650) 589-1660 or email me at ssannadan@adamsbroadwell.com. Thank you for your assistance with this matter.

Sincerely,



Sheila M. Sannadan
Legal Assistant

SMS:acp

[2] *See* Public Resources Code § 21092(b)(1) (stating that "all documents referenced in the draft environmental impact report or negative declaration" shall be made "available for review"); 14 Cal. Code Reg. § 15072(g)(4) (stating that all documents incorporated by reference in the MND . . . "shall be readily accessible to the public").

LOZEAU DRURY LLP

T 510.836.4200
F 510.836.4205

1939 Harrison Street, Ste. 150
Oakland, CA 94612

www.lozeaudrury.com
Hayley@lozeaudrury.com

November 14, 2024 LETTER #3

Via Email

Rick Hirsch, Contract Planner
Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307
rhirsch@interwestgrp.com

Orlando Acevedo, Assistant Town Manager
Community Development Department
Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307
planning@applevalley.org

Re: Comment on Mitigated Negative Declaration, Cordova Business Center Development Project (SPR 2023-006)

Dear Mr. Hirsch and Mr. Acevedo:

This comment is submitted on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") regarding the Initial Study and Mitigated Negative Declaration ("IS/MND") prepared for the Cordova Business Center Development Project (SPR 2023-006), which proposes the development of a 504,508-square-foot warehouse with 10,508 square feet of mezzanine space and 21,016 square feet of office space, located on the cross streets of Cordova Road and Central Road, on Assessor's Parcel Number 0463-491-09-0000 in the Town of Apple Valley ("Project").

SAFER is concerned that the IS/MND is improper under the California Environmental Quality Act due to the IS/MND's failure to adequately assess and mitigate the Project's potentially significant environmental impacts. SAFER requests that an environmental impact report (EIR) be prepared for the Project rather than an MND because there is a fair argument that the Project may have significant environmental impacts that have not been mitigated. An EIR will ensure that potentially significant impacts of this Project are fully disclosed, analyzed, and mitigated. [COMMENT #1]

SAFER reserves the right to supplement this comment throughout the administrative process. *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, 60 Cal. App. 4th 1109, 1121 (1997).

Sincerely,

Hayley Uno
Lozeau Drury LLP

BLUM, COLLINS & HO LLP
ATTORNEYS AT LAW
AON CENTER
707 WILSHIRE BOULEVARD
SUITE 4880
LOS ANGELES, CALIFORNIA 90017
(213) 572-0400

November 13, 2024 LETTER #4

Rick Hirsch
Consulting Planner
Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307

Via Email to:
rhirsch@interwestgrp.com

Subject: Comments on SPR 2023-006 Cordova Business Center Development Project MND (SCH NO. 2024100839)

Dear Mr. Hirsch,

Thank you for the opportunity to comment on the Mitigated Negative Declaration (MND) for the proposed SPR 2023-006 Cordova Business Center Development Project. Please accept and consider these comments on behalf of Golden State Environmental Justice Alliance. Also, Golden State Environmental Justice Alliance formally requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877.

1.0 Summary

The project proposes the construction and operation of one 504,508 square foot (sf) industrial warehouse warehousing building on approximately 29.8 net acres of vacant land. The 504,508 sf building is comprised of 483,492 sf of warehouse area and 21,016 sf of ground floor and mezzanine office area. The building includes 73 truck/trailer loading dock doors and the project site provides a total of 528 passenger vehicle parking stalls and 136 truck/trailer parking stalls.

2.0 Project Description [COMMENT#1]

The MND attempts to calculate and utilize a "pro-rata share" of the 2009 General Plan EIR Emissions assigned to the Project site as the applicable threshold for Air Quality, Energy, and GHG impacts. However, this does not account for the substantial new information and applicable regulations that have materialized since certification of the 2009 General Plan EIR (California statewide GHG reduction and Air Quality goals; VMT; etc as noted throughout this letter). Additionally, the the 2009 General Plan EIR assumes new development construction at 22% building coverage of the site while the proposed project is constructed at 38% site coverage, which

is nearly double the quantity analyzed for every site in the General Plan. This further represents the flaws in the MND's completely customized and erroneous methodology that misleads the public and decision makers by presenting impacts that are artificially presented as less than significant. The MND attempts to obfuscate the projects significant impacts (at minimum, Air Quality, GHG, and VMT) by creating artificial thresholds that do not comply with applicable laws, standards, and regulations for the environment. An EIR must be prepared to remove the "pro-rata share" methodology and replace it with applicable quantified thresholds for each section of environmental analysis. [COMMENT #1 CON'T]

III. Air Quality, VI. Energy, and VIII. Greenhouse Gas Emissions

The MND does not include for analysis relevant environmental justice issues in reviewing potential impacts, including cumulative impacts from the proposed project, and the environmental analysis that it tiers from also excludes this information. This is in conflict with CEQA Guidelines Section 15131 (c), which requires that "Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR. If information on these factors is not contained in the EIR, the information must be added to the record in some other manner to allow the agency to consider the factors in reaching a decision on the project." This is especially significant as the surrounding community is highly burdened by pollution. According to CalEnviroScreen 4.0[1], CalEPA's screening tool that ranks each census tract in the state for pollution and socioeconomic vulnerability, the proposed project's census tract (6071012101) is highly burdened by pollution. The surrounding community bears the impact of multiple sources of pollution and is more polluted than other census tracts in many pollution indicators measured by CalEnviroScreen. For example, the project census tract ranks in the 80th percentile for ozone burden and 60th percentile for traffic burdens. Ozone can cause lung irritation, inflammation, and worsening of existing chronic health conditions, even at low levels of exposure[2]. Exhaust fumes contain toxic chemicals that can damage DNA, cause cancer, make breathing difficult, and cause low weight and premature births[3]. [COMMENT #2]

The census tract ranks in the 85th percentile for solid waste facility impacts. Solid waste facilities can expose people to hazardous chemicals, release toxic gases into the air (even after these facilites are closed), and chemicals can leach into soil around the facility and pose a health risk to nearby

[1] CalEnviroScreen 4.0 https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40
[2] OEHHA Ozone https://oehha.ca.gov/calenviroscreen/indicator/air-quality-ozone
[3] OEHHA Traffic https://oehha.ca.gov/calenviroscreen/indicator/traffic-density

populations[4]. The census tract also bears more impacts from cleanup sites than 52% of the state. Chemicals in the buildings, soil, or water at cleanup sites can move into nearby communities through the air or movement of water[5].

Further, the census tract is a diverse community including 22% Hispanic, 10% African-American, and 2% Asian-American residents, whom are especially vulnerable to the impacts of pollution. The community also has a high rate of poverty, meaning 53% of the households in the census tract have a total income before taxes that is less than the poverty level. Income can affect health when people cannot afford healthy living and working conditions, nutritious food and necessary medical care[6]. Poor communities are often located in areas with high levels of pollution[7]. Poverty can cause stress that weakens the immune system and causes people to become ill from pollution[8]. Living in poverty is also an indication that residents may lack health insurance or access to medical care. Medical care is vital for this census tract as it ranks in the 89th percentile for incidence of cardiovascular disease and 88th percentile for incidence of asthma.

The State of California lists three approved compliance modeling softwares[9] for non-residential buildings: CBECC-Com, EnergyPro, and IES VE. CalEEMod is not listed as an approved software. The CalEEMod modeling does not comply with the 2022 Building Energy Efficiency Standards and under-reports the project's significant Energy impacts and fuel consumption to the public and decision makers. Since the MND did not accurately or adequately model the energy impacts in compliance with Title 24, a finding of significance must be made. An EIR with modeling using one of the approved software types must be prepared and circulated for public review in order to adequately analyze the project's significant environmental impacts. This is vital as the MND utilizes CalEEMod as a source in its methodology and analysis, which is clearly not an approved software. [COMMENT #3]

Additionally, the MND has not provided environmental analysis regarding all areas in which, "New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available." For example, the [COMMENT #3 CON'T]

[4] OEHHA Solid Waste Facilities https://oehha.ca.gov/calenviroscreen/indicator/solid-waste-sites-and-facilities
[5] OEHHA Cleanup Sites https://oehha.ca.gov/calenviroscreen/indicator/cleanup-sites
[6] OEHHA Poverty https://oehha.ca.gov/calenviroscreen/indicator/poverty
[7] Ibid.
[8] Ibid.
[9] California Energy Commission 2022 Energy Code Compliance Software https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-1

MND has not provided any analysis regarding AB 32 (2006)[10]/SB 32 (2016), implementing California's goals to reduce statewide greenhouse gas emissions to 40% below the 1990 level by 2030[11] and SB 350[12] (2015) reducing them to 80% below 1990 levels by 2050. The MND has also not discussed SCAQMD's implementation of SB 32, which is a 3,000 MTCO2e annual emissions threshold for industrial development[13]. The SCAQMD documentation provides substantial evidence that the thresholds are consistent with policy goals and GHG emissions reduction targets set by the state. Specifically, the thresholds were set at levels that capture 90% of the GHG emissions, consistent with EO S-3-05[14] target of reducing GHGs to 80% below 1990 levels by 2050. The MND has also not discussed AB 1279's[15] (2022) goal to achieve net zero greenhouse gas emissions by or before 2045 in California. The MND also excludes discussion and analysis of the Town's 2021 update to its Climate Action Plan[16]. The MND has not discussed SCAG's Connect SoCal RTP/SCS[17] that provides local plans for the Southern California region's shared climate goals through 2050. The MND must be revised to provide an environmental analysis regarding all areas that new information has become available in order to provide an adequate informational document. [COMMENT #3 CON'T]

The MND attempts to calculate and utilize a "pro-rata share" of the 2009 General Plan EIR Emissions assigned to the Project site as the applicable threshold for Air Quality, Energy, and GHG impacts. However, as noted above, this does not account for the substantial new information and applicable regulations that have materialized since certification of the 2009 General Plan EIR. Additionally, the the 2009 General Plan EIR assumes new development construction at 22% building coverage of the site while the proposed project is constructed at 38% site coverage, which is nearly double the quantity analyzed for every site in the General Plan. This further represents the flaws in the MND's completely customized and erroneous methodology that misleads the public and decision makers by presenting impacts that are artificially presented as less than significant. The MND excludes stating that the project will generate 5,198.14 MTCO2e, which is hidden in the GHG Appendix Table 9: Total Project GHG Emissions. The project's annual 5,198.14 MTCO2e exceeds the SCAQMD's threshold of 3,000 MTCO2e and results in a [COMMENT #4]

[10] AB 32 https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200520060AB32
[11] SB 32 https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32
[12] SB 350 https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350
[13] https://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf
[14] https://www.library.ca.gov/wp-content/uploads/GovernmentPublications/executive-order-proclamation/5129-5130.pdf
[15] AB 1279 https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279
[16] https://www.applevalley.org/home/showpublisheddocument/31233/637623641454430000
[17] https://scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf?1714175547

significant impact. An EIR must be prepared to include a finding of significance with Air Quality impact thresholds A and B, Energy impact thresholds A and B, and GHG impact thresholds A and B as the MND has not analyzed the project in accordance with all applicable legislation and quantified requirements and will generate 5,198.14 MTCO2e annually, which exceeds the SCAQMD's thresholds to meet statewide GHG reduction goals.

XI. Land Use and Planning

[XI. Land Use & Planning Comment #I]

The MND does not provide a consistency analysis with all land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The project has significant potential to conflict with many of these items, including but not limited to the following from the Climate Action Plan and General Plan and an EIR must be prepared with a consistency analysis in order to provide an adequate and accurate environmental document:

1. ND-6. For projects within the North Apple Valley Industrial Specific Plan, develop employee housing within one mile of the industrial project. (Climate Action Plan) [COMMENT 1.ND-6]

2. ND-7. Preserve trees occurring on-site either through in situ protection during and after construction, or through transplant and relocation within landscaped areas.(Climate Action Plan) [COMMENT 2. ND-7]

3. ND-10. Install bus stop(s) and secure scheduled transit service from Victor Valley Transit Authority. (Climate Action Plan) [COMMENT 3. ND-10]

4. ND-14. Use passive solar design by orienting buildings and incorporating landscaping to maximize passive solar heating during the winter, and minimize solar heating during the summer. (Climate Action Plan) [COMMENT 4. ND-14]

5. Air Quality Element Program 1.A.1: Apple Valley shall adhere to existing and future greenhouse gas and global warming rules, regulations, and requirements to monitor and reduce emissions. [COMMENT 5. Air Quality Element Program 1.A1]

6. Air Quality Element Policy 1.B: The Town shall proactively regulate local pollutant emitters by coordinating and cooperating with local, regional and federal efforts to monitor, manage and decrease the levels of major pollutants affecting the Town and region, with particular emphasis on PM10 and ozone emissions, as well as other emissions associated with diesel-fueled equipment and motor vehicles. [COMMENT 6. Air Quality Element Policy 1.B.]

7. Circulation Element Program 1.A.4: The Town shall require that all intersections maintain a Level of Service D during both the morning and evening peak hour. [COMMENT 7. Circulation Element Program 1.A.4]

[COMMENT 7 CON'T]

Further, the MND omits discussion and analysis regarding the project's inconsistency with other land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. For example, the project will have a significant and unavoidable cumulatively considerable impact to Greenhouse Gas Emissions because it will exceed the threshold of 3,000 metric tons of CO2e per year. The Land Use and Planning analysis omits any discussion regarding inconsistencies with California's statewide GHG reduction goals for 2030 and 2050. An EIR must be prepared to include these significant and unavoidable cumulatively considerable impacts for analysis and include a finding of significance.

The MND has not provided any information or analysis on the buildout conditions of the General Plan or the North Apple Valley Industrial Specific Plan (NAVISP). Table II-2: Specific Plan Land Use Designations Buildout Summary of the NAVISP[18] states that the Industrial - Specific Plan designation will have a buildout square footage of 42,599,240, and this analysis is based upon new development construction at 22% building coverage of the site. The proposed building constructed at 38% site coverage, which is nearly double the quantity analyzed for every site in the NAVISP. Other projects in the NAVISP area have also constructed at higher building coverage rates than the NAVISP analyzed, such as the Project Jupiter Distribution Warehouse[19] (29% building coverage of the site), the Development at Dale Evans and Lafayette[20](35% building coverage of the site), GTS Cold Storage[21] (49.9% building coverage of the site), 1M Warehouse (36.9% building coverage of the site), and Cordova Complex and Quarry at Pawnee Warehouses[22] (Building 1: 41.2% building coverage of the site; Building 2: 44.2% building coverage of the site). The MND has not demonstrated that the proposed project is within the buildout scenario of the NAVISP, including all cumulative development constructed since the inception of the NAVISP, approved projects not yet constructed, and "projects in the pipeline." An EIR must be prepared to include this analysis in order to provide an adequate and accurate environmental analysis.

Table III-41: Preferred Alternative General Plan Land Use Designation Build Out Summary: Town & Unincorporated Lands of the General Plan EIR[23] states that the Industrial Specific Plan land use designation within the Town limits (where the project was located at the time of the GP EIR analysis) will have a buildout of 36,938,445 total square feet. The proposed project's 504,508

[18] North Apple Valley Industrial Specific Plan https://www.applevalley.org/home/showpublisheddocument/18587/636149111285930000
[19] Project Jupiter Distribution Warehouse https://ceqanet.opr.ca.gov/2016041058
[20] The Development at Dale Evans and Lafayette https://ceqanet.opr.ca.gov/2022120356/2
[21] GTS Cold Storage https://ceqanet.opr.ca.gov/2023080221
[22] Cordova Complex and Quarry at Pawnee Warehouses https://ceqanet.opr.ca.gov/2023090009/2
[23] Apple Valley General Plan EIR https://www.applevalley.org/home/showpublisheddocument/24331/636552384686570000

square feet represents 1.37% of the General Plan buildout for this land use designation, which is significant to be attributed to a single project. As discussed above, the MND has not demonstrated that the proposed project is within the General Plan buildout scenario, including all cumulative development constructed since approval of the General Plan, approved projects not yet constructed, and "projects in the pipeline." Other recent industrial projects such as Project Jupiter Distribution Warehouse (1,360,875 square feet of industrial/warehouse space[24]), GTS Cold Storage (385,004 square feet of industrial/warehouse space[25]), The Development at Dale Evans and Lafayette (1,207,544 square feet of industrial/warehouse space[26]), Apple Valley 143 (2,520,000 square feet of industrial/warehouse space[27]), 1M Warehouse (1,080,125 square feet of industrial/warehouse space[28]), and Cordova Complex and Quarry at Pawnee (3,022,294 square feet of industrial/warehouse space[29]), cumulatively with the proposed project generate 10,080,350 square feet of industrial/warehouse space, which is 27.3% of the General Plan buildout capacity accounted for by only a few recent industrial projects. An EIR must be prepared to include this analysis in order to provide an adequate and accurate environmental analysis.

XIV. Population and Housing

[XIV. Population and Housing Comment #1]

The MND finds that impacts to population and housing will not be significant without providing any meaningful quantified analysis or evidence to support this conclusion. The MND provides a general statement that, "The Project projects 200 employees at 100 per shift x 2 shifts. Therefore, the project will not induce substantial population growth either directly nor indirectly." The MND does not provide the methodology for this calculation to determine the quantity of employees. The MND maintains throughout the document that the future tenants are unknown, but the MND provides tenant-specific details that the building will operate with two shifts. An EIR must be prepared to include the methodology for calculating the project's alleged 200 employees and a project narrative describing all tenant operations as the future tenant is clearly known and must be accounted for in all aspects of environmental analysis.

The MND has not provided evidence that the local available workforce is qualified for or interested in work in the construction and/or industrial sector. Without this supporting evidence, the project must relying on the entire labor force within the greater SCAG region to fill the project's construction and operational jobs. This will increase VMT and emissions during all phases of

[24] Project Jupiter Distribution Warehouse https://ceqanet.opr.ca.gov/2016041058
[25] GTS Cold Storage https://ceqanet.opr.ca.gov/2023080221
[26] The Development at Dale Evans and Lafayette https://ceqanet.opr.ca.gov/2022120356/2
[27] Apple Valley 143 https://ceqanet.opr.ca.gov/2022070019
[28] 1M Warehouse https://ceqanet.opr.ca.gov/2023020285/2
[29] Cordova Complex and Quarry at Pawnee https://ceqanet.opr.ca.gov/2023090009/2

construction and operations and an EIR must be prepared to account for longer worker trip distances.

SCAG's Connect SoCal Demographics and Growth Forecast[30] states that Apple Valley will add 12,200 jobs between 2016 - 2045. Utilizing the MND's calculation of 200 employees, the project represents 1.64% of Apple Valley's employment growth from 2016 - 2045. A single project accounting for this amount of growth over 29 years represents a significant amount of growth. An EIR must be prepared to include this analysis, and also provide a cumulative analysis discussion of projects approved since 2016, General Plan adoption, and projects "in the pipeline" to determine if the project will exceed SCAG's and/or the Town's employment and/or population growth forecast. For example, other recent projects such as Apple Valley 143 (2,520,000 square feet of industrial/warehouse space; 2,108 employees[31]), Apple Valley Commercial Project (49,995 square feet commercial space; 75 employees[32]), The Development at Dale Evans and Lafayette (1,207,544 square feet of industrial/warehouse space; 1,172 employees[33]), 1M Warehouse (1,080,125 square feet of industrial/warehouse space; 904 employees[34]), Cordova Complex and Quarry at Pawnee (3,022,294 square feet of industrial/warehouse space; 2,529 employees[35]), and Inland Empire North Logistics Center (2,604,446 square feet of industrial/warehouse space; 2,179 employees[36]) combined with the proposed project will cumulatively generate 9,167 employees, which is 75.1% of Apple Valley's employment growth forecast over 29 years accounted for by only seven recent industrial projects. These totals increase exponentially when commercial and other industrial development activity is added to the brief list of recent activity above. An EIR must be prepared to include this information for analysis, and also provide a cumulative analysis discussion of projects approved since 2016 (SCAG), General Plan adoption, and projects "in the pipeline" to determine if the proposed project will exceed the employment/population growth forecasts by SCAG and/or the Town's General Plan.

XVII. Transportation

[XVII. Transportation Comment #1]

The MND attempts to calculate and utilize a "pro-rata share" of the 2009 General Plan EIR Emissions assigned to the Project site as the applicable threshold for Transportation impacts. However, as noted above, this does not account for the substantial new information and applicable

[30] SCAG Connect SoCal Demographics and Growth Forecast adopted September 3, 2020 https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579
[31] Apple Valley 143 https://ceqanet.opr.ca.gov/2022070019
[32] Apple Valley Commercial Project https://ceqanet.opr.ca.gov/2021100585
[33] The Development at Dale Evans and Lafayette https://ceqanet.opr.ca.gov/2022120356/2
[34] 1M Warehouse https://ceqanet.opr.ca.gov/2023020285/2
[35] Cordova Complex and Quarry at Pawnee https://ceqanet.opr.ca.gov/2023090009/2
[36] Inland Empire North Logistics Center https://ceqanet.opr.ca.gov/2023090366/2

regulations that have materialized since certification of the 2009 General Plan EIR. Additionally, the the 2009 General Plan EIR assumes new development construction at 22% building coverage of the site while the proposed project is constructed at 38% site coverage, which is nearly double the quantity analyzed for every site in the General Plan. This further represents the flaws in the MND's completely customized and erroneous methodology that misleads the public and decision makers by presenting impacts that are artificially presented as less than significant. The MND creates a customized artificial threshold of the General Plan EIR Pro Rata Allocation of 855 average daily trips (ADT) assigned to the project site. The MND concludes that based on this, the project will generate only 846 ADT (9 ADT fewer than assigned by the GP EIR). This is illogical on its face as the project is proposed at nearly double the building site coverage as analyzed by the General Plan EIR. The MND utilizes the artificial reduction of 9 ADT to improperly "screen out" the project from preparing a project-specific VMT analysis because it meets the San Bernardino County VMT Guidelines for projects generating less than 110 ADT. This is nonsensical as the project will actually generate at least 846 ADT and the County Guidelines do not permit any type of ADT credits or reductions. The MND attempts to obfuscate the significant and unavoidable Transportation impacts of the proposed project in order to mislead the public and decision makers. An EIR must be prepared to include a project-specific VMT analysis in order to provide an adequate and accurate environmental analysis.

The MND has not adequately analyzed the project's potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses; or the project's potential to result in inadequate emergency access. The MND has not provided any exhibits depicting the available truck/trailer turning radius at the intersection of the project driveways and the adjacent streets to determine if there is enough space available to accommodate heavy truck maneuvering. Further, there are no exhibits providing on-site analysis regarding available space on the property to accommodate heavy truck maneuvering. Notably, the site provides truck/trailer parking stalls that appear to also be utilized by passenger cars because they are in a tandem configuration. These parking stalls that may be in use at any time and further restrict truck/trailer movement on the site. An EIR must be prepared for the proposed project with this analysis in order to provide an adequate and accurate environmental analysis.

The MND states that the project will be, "designed in accordance with the applicable NAVISP Development Standards and Guidelines, consistent with the GPEIR and NAVISP EIR (as amended Ord. 428 and 351) Circulation Element, the proposed project will not increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) and has compatible uses." The MND has not provided any details regarding the requirements for these improvements or meaningful analysis of the project's compliance or noncompliance with these requirements.

Deferring this environmental analysis required by CEQA to the construction permitting phase is improper mitigation and does not comply with CEQA's requirement for meaningful disclosure and adequate informational documents. This does not comply with CEQA's requirements for adequate informational documents and meaningful disclosure (CEQA § 15121 and 21003(b)). An EIR must be prepared to include a finding of significance as the MND has not provided any meaningful evidence to support a less than significant finding.

There are also no exhibits depicting emergency vehicle access. A similar statement is made regarding emergency vehicle access, in that "The project will be required to extend half width improvement for Central and Cordova Roads to the Property boundaries. Therefore, with mitigation incorporated the Project will not result in inadequate access.." The MND has not provided any details regarding the requirements for emergency access or meaningful analysis of the project's compliance or noncompliance with these requirements. Deferring this environmental analysis required by CEQA to the construction permitting phase is improper mitigation and does not comply with CEQA's requirement for meaningful disclosure and adequate informational documents. This does not comply with CEQA's requirements for adequate informational documents and meaningful disclosure (CEQA § 15121 and 21003(b)).

An EIR must be prepared to include a finding of significance as the MND has not provided any meaningful evidence to support a less than significant finding.

[BCH LETTER XXI Mandatory Findings of Significance COMMENT #1]

XXI. Mandatory Findings of Significance

The MND has not provided an adequate or accurate cumulative analysis discussion here to demonstrate the impact of the proposed project in a cumulative setting. The MND has not provided any information or analysis on the buildout conditions of the General Plan or the North Apple Valley Industrial Specific Plan (NAVISP). Table II-2: Specific Plan Land Use Designations Buildout Summary of the NAVISP[37] states that the Industrial - Specific Plan designation will have a buildout square footage of 42,599,240, and this analysis is based upon new development construction at 22% building coverage of the site. The proposed building constructed at 38% site coverage, which is nearly double the quantity analyzed for every site in the NAVISP. Other projects in the NAVISP area have also constructed at higher building coverage rates than the NAVISP analyzed, such as the Project Jupiter Distribution Warehouse[38] (29% building coverage of the site), the Development at Dale Evans and Lafayette[39](35% building coverage of the site),

[37] North Apple Valley Industrial Specific Plan https://www.applevalley.org/home/showpublisheddocument/18587/636149111285930000
[38] Project Jupiter Distribution Warehouse https://ceqanet.opr.ca.gov/2016041058
[39] The Development at Dale Evans and Lafayette https://ceqanet.opr.ca.gov/2022120356/2

GTS Cold Storage[40] (49.9% building coverage of the site), 1M Warehouse (36.9% building coverage of the site), and Cordova Complex and Quarry at Pawnee Warehouses[41] (Building 1: 41.2% building coverage of the site; Building 2: 44.2% building coverage of the site). The MND has not demonstrated that the proposed project is within the buildout scenario of the NAVISP, including all cumulative development constructed since the inception of the NAVISP, approved projects not yet constructed, and "projects in the pipeline." An EIR must be prepared to include this analysis in order to provide an adequate and accurate environmental analysis.

Table III-41: Preferred Alternative General Plan Land Use Designation Build Out Summary: Town & Unincorporated Lands of the General Plan EIR[42] states that the Industrial Specific Plan land use designation within the Town limits (where the project was located at the time of the GP EIR analysis) will have a buildout of 36,938,445 total square feet. The proposed project's 504,508 square feet represents 1.37% of the General Plan buildout for this land use designation, which is significant to be attributed to a single project. As discussed above, the MND has not demonstrated that the proposed project is within the General Plan buildout scenario, including all cumulative development constructed since approval of the General Plan, approved projects not yet constructed, and "projects in the pipeline." Other recent industrial projects such as Project Jupiter Distribution Warehouse (1,360,875 square feet of industrial/warehouse space[43]), GTS Cold Storage (385,004 square feet of industrial/warehouse space[44]), The Development at Dale Evans and Lafayette (1,207,544 square feet of industrial/warehouse space[45]), Apple Valley 143 (2,520,000 square feet of industrial/warehouse space[46]), 1M Warehouse (1,080,125 square feet of industrial/warehouse space[47]), and Cordova Complex and Quarry at Pawnee (3,022,294 square feet of industrial/warehouse space[48]), cumulatively with the proposed project generate 10,080,350 square feet of industrial/warehouse space, which is 27.3% of the General Plan buildout capacity accounted for by only a few recent industrial projects. An EIR must be prepared to include this analysis in order to provide an adequate and accurate environmental analysis.

Further, employment generation has not been adequately analyzed as other recent industrial Other recent projects such as Apple Valley 143 (2,520,000 square feet of industrial/warehouse space;

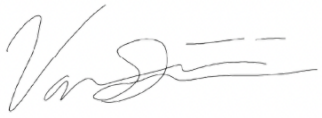
[40] GTS Cold Storage https://ceqanet.opr.ca.gov/2023080221
[41] Cordova Complex and Quarry at Pawnee Warehouses https://ceqanet.opr.ca.gov/2023090009/2
[42] Apple Valley General Plan EIR https://www.applevalley.org/home/showpublisheddocument/24331/636552384686570000
[43] Project Jupiter Distribution Warehouse https://ceqanet.opr.ca.gov/2016041058
[44] GTS Cold Storage https://ceqanet.opr.ca.gov/2023080221
[45] The Development at Dale Evans and Lafayette https://ceqanet.opr.ca.gov/2022120356/2
[46] Apple Valley 143 https://ceqanet.opr.ca.gov/2022070019
[47] 1M Warehouse https://ceqanet.opr.ca.gov/2023020285/2
[48] Cordova Complex and Quarry at Pawnee https://ceqanet.opr.ca.gov/2023090009/2

2,108 employees[49]), Apple Valley Commercial Project (49,995 square feet commercial space; 75 employees[50]), The Development at Dale Evans and Lafayette (1,207,544 square feet of industrial/warehouse space; 1,172 employees[51]), 1M Warehouse (1,080,125 square feet of industrial/warehouse space; 904 employees[52]), Cordova Complex and Quarry at Pawnee (3,022,294 square feet of industrial/warehouse space; 2,529 employees[53]), and Inland Empire North Logistics Center (2,604,446 square feet of industrial/warehouse space; 2,179 employees[54]) combined with the proposed project will cumulatively generate 9,167 employees, which is 75.1% of Apple Valley's employment growth forecast over 29 years accounted for by only seven recent industrial projects. These totals increase exponentially when commercial and other industrial development activity is added to the brief list of recent activity above. An EIR must be prepared to include this information for analysis, and also provide a cumulative analysis discussion of projects approved since 2016 (SCAG), General Plan adoption, and projects "in the pipeline" to determine if the proposed project will exceed the employment/population growth forecasts by SCAG and/or the Town's General Plan.

Conclusion

For the foregoing reasons, GSEJA believes the MND is flawed and an EIR must be prepared for the proposed project and circulated for public review. Golden State Environmental Justice Alliance requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877.

Sincerely,



Vashon Simien
Blum, Collins & Ho LLP

Attachments:
1. SWAPE Technical Analysis

[49] Apple Valley 143 https://ceqanet.opr.ca.gov/2022070019
[50] Apple Valley Commercial Project https://ceqanet.opr.ca.gov/2021100585
[51] The Development at Dale Evans and Lafayette https://ceqanet.opr.ca.gov/2022120356/2
[52] 1M Warehouse https://ceqanet.opr.ca.gov/2023020285/2
[53] Cordova Complex and Quarry at Pawnee https://ceqanet.opr.ca.gov/2023090009/2
[54] Inland Empire North Logistics Center https://ceqanet.opr.ca.gov/2023090366/2

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

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

November 11, 2024

Gary Ho
Blum, Collins & Ho LLP
707 Wilshire Blvd, Ste. 4880
Los Angeles, CA 90017

Subject: Comments on the Cordova Business Center Project (SCH No. 2024100839)

Dear Mr. Ho,

We have reviewed the October 2024 Subsequent Initial Study and Mitigated Negative Declaration ("SIS/MND") for the Cordova Business Center Project ("Project") located in the City of Apple Valley ("City"). The Project proposes to construct 504,508-square-feet ("SF") of warehouse space, including 21,016-SF of office space and 528 parking spaces, on the 30-acre site.

Our review concludes that the SIS/MND fails to adequately evaluate the Project's air quality and health risk. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project may be underestimated and inadequately addressed. An Environmental Impact Report ("EIR") should be prepared to adequately assess and mitigate the potential air quality and health risk impacts the project may have on individuals and the environment.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions [SWAPE COMMENT #1]

The SIS/MND's air quality analysis relies on emissions calculated with the California Emissions Estimator Model ("CalEEMod") Version 2022.1 (p. 55).[1] 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 the California Environmental Quality

[1] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide.

Act ("CEQA") requires that such changes be justified by substantial evidence.[2] After entering all relevant data into the model, CalEEMod calculates the emissions from both construction and operational phases, producing "output files." These files outline the parameters used in the emissions calculations and highlight any modifications made to the default values, along with justifications for each change.

[SWAPE COMMENT #1 CON'T]

Upon review of the Project's CalEEMod output files, provided in the Air Quality, Greenhouse Gas, and Energy Analysis ("AQ & GHG Assessment") as Appendix 3.0 to the SIS/MND, we identified several model inputs that are inconsistent with the information presented in the SIS/MND. These discrepancies, outlined below, suggest the Project's construction emissions may be underestimated. An EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction of the Project will have on local and regional air quality.

Unsubstantiated Changes to Individual Construction Phase Lengths

[SWAPE COMMENT #2]

Review of the CalEEMod output files reveals that the "15428 - AV3PLC Cordova" model includes the following justification for changes to the default construction schedule (see excerpt below) (Appendix 3.0, pp. 84, 85).

Screen	Justification
Construction: Construction Phases	Schedule based on the 2025 Opening Year
Construction: Off-Road Equipment	Equipment based on information provided by the Applicant
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction
Operations: Vehicle Data	Trip characteristics based on information provided in the Trip Generation assessment.
Operations: Fleet Mix	Passenger Car Mix estimated based on CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, MCY). Truck Fleet Mix based on 2, 3 and 4 axle trucks.
Operations: Energy Use	Per client data, Project will not utilize natural gas.

The model includes the following construction schedule, including these changes (see excerpt below) (Appendix 3.0, pp. 72).

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/2/2024	1/29/2024	5.00	20.0	20
Grading	Grading	1/30/2024	4/22/2024	5.00	60.0	45
Building Construction	Building Construction	4/23/2024	11/3/2025	5.00	400	440
Paving	Paving	1/28/2025	11/3/2025	5.00	200	35
Architectural Coating	Architectural Coating	1/28/2025	11/3/2025	5.00	200	35

The CalEEMod User's Guide requires any changes to model defaults be justified.[3] As shown above in the "User Changes to Default Data" table above, the justification provided for these changes is:

> "Schedule based on the 2025 Opening Year" (Appendix 3.0, pp. 84).

Regarding the Project's anticipated construction duration, the SIS/MND states:

[2] "CalEEMod User's Guide." CAPCOA, May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 13, 14.
[3] *Ibid.*

> "For purposes of analysis, construction of Project is expected to commence in January 2024 and would last through November 2025. The construction schedule utilized in the analysis represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines (12)" (p. 57).

The SIS/MND and associated documents, however, remain unsubstantiated as the SIS/MND fails to provide a sufficient source for the individual construction phase lengths. While the SIS/MND substantiates the total construction duration and claims to employ a 'worst-case analysis,' the SIS/MND fails to mention the individual construction phase lengths. Until the individual phases are substantiated by the SIS/MND, the model should have included proportionately altered individual phase lengths that match the proposed construction duration of 22 months.[4]

The construction emissions are improperly spread out over a longer period of time for some phases, but not for others. According to the CalEEMod User's Guide, each construction phase is associated with different emissions activities (see excerpt below).[5]

> ***Demolition*** involves removing buildings or structures.
>
> ***Site Preparation*** involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.
>
> ***Grading*** involves the cut and fill of land to ensure that the proper base and slope is created for the foundation.
>
> ***Building Construction*** involves the construction of the foundation, structures and buildings.
>
> ***Architectural Coating*** involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.
>
> ***Paving*** involves the laying of concrete or asphalt such as in parking lots, roads, driveways, or sidewalks.

By altering and extending the construction phase lengths without proper justification, the model assumes there are a greater number of days to complete the construction activities required by the prolonged phases. There will be less construction activities required per day and fewer pollutants emitted per day as a result of the unsubstantiated changes. The model may, therefore, underestimate the peak daily emissions associated with construction and should not be relied upon to determine Project significance.

[4] See Attachment A for proportionately altered construction schedule.
[5] "CalEEMod User's Guide." CAPCOA, May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 32.

Incorrect Application of Tier 4 Interim Engine Tiers

[SWAPE COMMENT #3]

The AQ & GHG Assessment demonstrates that the "15428 - AV3PLC Cordova" model includes changes to the default off-road equipment engine tiers (see excerpt below) (pp. 84, 85).

Screen	Justification
Construction: Construction Phases	Schedule based on the 2025 Opening Year
Construction: Off-Road Equipment	Equipment based on information provided by the Applicant
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction
Operations: Vehicle Data	Trip characteristics based on information provided in the Trip Generation assessment.
Operations: Fleet Mix	Passenger Car Mix estimated based on CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, MCY). Truck Fleet Mix based on 2, 3 and 4 axle trucks.
Operations: Energy Use	Per client data, Project will not utilize natural gas.

The model assumes that the Project's off-road grading equipment fleet would meet Tier 4 Interim emissions standards (see excerpt below) (Appendix 3.0, pp. 72, 73).

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Interim	3.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Interim	12.0	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Tier 4 Interim	5.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	6.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Building Construction	Crawler Tractors	Diesel	Average	6.00	8.00	87.0	0.43
Paving	Pavers	Diesel	Average	4.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	4.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	4.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48

Additionally, the AQ & GHG Assessment asserts that:

> "The Construction Contractor shall ensure that off-road diesel grading equipment rated at 150 horsepower (hp) or greater, complies with Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 4 off-road emissions standards or equivalent and shall ensure that all construction equipment is tuned and maintained in accordance with the manufacturer's specifications" (p. 10).

The inclusion of more stringent emissions standards, however, remains unsubstantiated as the SIS/MND fails to discuss Tier 4 Interim engine tiers. The SIS/MND failure to explicitly require Tier 4 Interim emissions standards through a formal mitigation measure poses an issue as according to the Association of Environmental Professionals ("AEP") *CEQA Portal Topic Paper* on mitigation measures:

> "While not 'mitigation', a good practice is to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP). Often the MMRP is all that accompanies building and construction plans through the permit process. If the

design features are not listed as important to addressing an environmental impact, it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact" (emphasis added).[6]

Because measures not formally included in the mitigation monitoring and reporting program ("MMRP") may be removed from the Project's design altogether, the model's assumption of Tier 4 Interim emissions standards is unsupported.

Updated Analysis Indicates a Potentially Significant Air Quality Impact

[SWAPE COMMENT #4]

We prepared an updated CalEEMod model, utilizing Project-specific information provided by the AQ & GHG Assessment to more accurately assess the Project's air quality emissions. In our updated model, we omitted the unsubstantiated application of Tier 4 Interim mitigation values and proportionately altered the construction phase lengths to match the total construction duration of 22 months. [7]

Our updated analysis estimates that the volatile organic compounds ("VOC") and nitrogen oxides ("NO_x") emissions associated with Project construction exceed the applicable Mojave Desert Air Quality Management District ("MDAQMD") threshold of 137 pounds per day ("lbs/day"), as referenced by the SIS/MND (p. 58, Table III-2) (see table below).[8]

Model	Construction VOC (lbs/day)	Construction NO_x (lbs/day)
SIS/MND	19.9	81.9
SWAPE	158	156
% Increase	694%	91%
MDAQMD Threshold	**137**	**137**
Exceeds?	***Yes***	***Yes***

The Project's construction-related VOC and NO_x emissions, as demonstrated above, increase by approximately 694% and 91%, which exceed the applicable MDAQMD significance threshold. SWAPE's updated modeling indicates that the Project would result in a potentially significant air quality impact, which the DEIR fails to identify or address. Consequently, a revised EIR is should be prepared to properly assess and mitigate the Project's potential air quality impact.

[6] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 6.
[7] See Attachment B for updated CalEEMod model.
[8] "California Environmental Quality Act (CEQA) And Federal Conformity Guidelines." MDAQMD, August 2016, *available at*: https://www.mdaqmd.ca.gov/home/showdocument?id=192#:~:text=Significance%20Thresholds,-Any%20project%20is&text=Exposes%20sensitive%20receptors%20to%20substantial,than%20or%20equal%20to%201, p. 10.

Diesel Particulate Matter Emissions Inadequately Evaluated [SWAPE COMMENT #4 CON'T]

The SIS/MND concludes that the Project would result in a less-than-significant health risk impact, despite not conducting a quantified construction or operational health risk assessment ("HRA"). Regarding the Project's potential to expose sensitive receptors to significant pollutant concentrations, the SIS/MND states:

> "Because the Project consists of a total Building Area of 494,000 sq ft of warehouse and distribution uses within one building on approximately 29.79 net acres and the nearest residence is approximately 1,800 feet from the project site, no analysis is required. The AQA also concluded that the results of their regional analysis indicated that "the Project will generate fewer truck trips and consequently emissions than if the site were developed consistent with the general plan land uses as evaluated in the 2009 EIR. Therefore, sensitive receptors would not be subject to a significant air quality impact during Project construction and operational activities beyond those already disclosed in the prior CEQA document for the GPEIR" (p. 31).

The SIS/MND that because the project is smaller in scale than initially planned and relatively distant from residential receptors, it would not introduce new or greater air quality risks during Project construction or operation that were not already accounted for in the prior CEQA review. However, the SIS/MND's evaluation of the Project's potential health risk impacts, as well as the subsequent less-than-significant impact conclusion, is unsupported.

The Project's omission of a quantified construction and operational HRA is inconsistent with CEQA's requirement to "make a reasonable effort to substantively connect a project's air quality impacts to likely health consequences."[9] Additionally, the Project does not align with guidance from the California Department of Justice ("CA DOJ"), which recommends that all warehouse projects conduct a quantitative HRA in accordance with the standards set by the Office of Environmental Health Hazard Assessment ("OEHHA"), the agency responsible for HRA guidance in California.

By concluding a less-than-significant impact without performing a quantified construction or operational HRA for nearby, existing sensitive receptors, the SIS/MND fails to compare the Project's excess cancer risk to the MDAQMD's specific numeric threshold of 10 in one million. Consistent with the most applicable guidance, an assessment of health risks to nearby, existing receptors resulting from Project construction and operation should be conducted.

Screening-Level Analysis Demonstrates Potentially Significant Health Risk Impact [SWAPE COMMENT #5]

We prepared a screening-level risk assessment using AERSCREEN, which is a screening level air quality dispersion model.[10] AERSCREEN uses a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be

[9] "Sierra Club v. County of Fresno." Supreme Court of California, December 2018, a*vailable at:* https://ceqaportal.org/decisions/1907/Sierra%20Club%20v.%20County%20of%20Fresno.pdf.
[10] "AERSCREEN Released as the EPA Recommended Screening Model," U.S. EPA, April 2011, *available at:* https://www.epa.gov/sites/default/files/2020-10/documents/20110411_aerscreen_release_memo.pdf.

exposed. If an unacceptable air quality hazard is estimated using AERSCREEN, a more refined modeling approach should be conducted prior to approval of the Project.

We prepared a preliminary HRA of the Project's construction and operational health risk impact to residential sensitive receptors using the annual $PM_{2.5}$ exhaust estimates from the "15428 - AV3PLC Cordova" model's output files, included in the AQ & GHG Assessment. Consistent with OEHHA's recommendations, we assumed residential exposure begins during the third trimester stage of life. The SIS/MND's construction CalEEMod emissions indicate that construction activities will generate approximately 819 pounds of diesel particulate matter ("DPM") over the 671-day construction period.[11] The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project construction, we calculated an average DPM emission rate by the following equation:

$$\text{Emission Rate } \left(\frac{\text{grams}}{\text{second}}\right) = \frac{819.2 \text{ lbs}}{671 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3{,}600 \text{ seconds}} = \mathbf{0.00641\ g/s}$$

Using this equation, we estimated a construction emission rate of 0.00641 grams per second ("g/s"). Subtracting the 671-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 28.16 years. The SIS/MND's operational CalEEMod emissions indicate that operational activities will generate approximately 140 pounds of DPM per year throughout operation. Applying the same equation used to estimate the construction DPM rate, we estimated the following emission rate for Project operation:

$$\text{Emission Rate } \left(\frac{\text{grams}}{\text{second}}\right) = \frac{140 \text{ lbs}}{365 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3{,}600 \text{ seconds}} = \mathbf{0.00201\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.00201 g/s. Construction and operation were simulated as a 30-acre rectangular area source in AERSCREEN, with approximate dimensions of 492- by 246-meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution. The population of the City of Apple Valley was obtained from U.S. 2023 Census data.[12]

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. U.S. Environmental Protection Agency ("U.S. EPA") guidance suggests that in screening procedures, the annualized average concentration of an air pollutant to be estimated by multiplying the single-hour concentration by 10%.[13] According to the AERSCREEN output files the

[11] See Attachment C for health risk calculations.
[12] "Apple Valley." U.S. Census Bureau, 2023, *available at:* https://datacommons.org/place/geoId/0602364.
[13] "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised." U.S. EPA, October 1992, *available at:* https://www.epa.gov/sites/default/files/2020-09/documents/epa-454r-92-019_ocr.pdf.

maximally exposed individual receptor would be located 250 meters from the Project site. The SIS/MND states that the nearest sensitive receptor is in actuality a residence located 1,800 feet, or approximately 550 meters, away from the Project site (p. 63). Consequently, the single-hour concentration estimated by AERSCREEN for Project construction is 0.9273 µg/m^3 DPM at around 550 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.00927 µg/m^3 for Project construction at the nearest sensitive receptor. For Project operation, the single-hour concentration estimated by AERSCREEN is 0.2914 µg/m^3 DPM at approximately 550 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.0391 µg/m^3 for Project operation at the nearest sensitive receptor.[14]

We calculated the excess cancer risk to the nearest sensitive receptor using applicable HRA methodologies prescribed by OEHHA, as recommended by the South Coast Air Quality Management District ("SCAQMD") and adopted by the MDAQMD.[15] Guidance from OEHHA and the California Air Resources Board ("CARB") recommends the use of a standard point estimate approach, including high-point estimate (i.e. 95th percentile) breathing rates and age sensitivity factors ("ASF") in order to account for the increased sensitivity to carcinogens during early-in-life exposure and accurately assess risk for susceptible subpopulations such as children. The residential exposure parameters, such as the daily breathing rates, exposure duration, ASFs, fraction of time at home, and exposure frequency used for the various age groups in our screening-level HRA are as follows:

[14] See Attachment D for AERSCREEN output files.

[15] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act." SCAQMD, October 2020, available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf?sfvrsn=19, p. 19; see also "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

Exposure Assumptions for Residential Individual Cancer Risk						
Age Group	**Breathing Rate** (L/kg-day)[16]	**Age Sensitivity Factor**[17]	**Exposure Duration** (years)	**Fraction of Time at Home**[18]	**Exposure Frequency** (days/year)[19]	**Exposure Time** (hours/day)
3rd Trimester	361	10	0.25	1	350	24
Infant (0 - 2)	1090	10	2	1	350	24
Child (2 - 16)	572	3	14	1	350	24
Adult (16 - 30)	261	1	14	0.73	350	24

For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose for each age group. Once determined, contaminant dose is multiplied by the cancer potency factor in units of inverse dose expressed in milligrams per kilogram per day (mg/kg/day^{-1}) to derive the cancer risk estimate. To assess exposures, we used the following dose algorithm:

$$\text{Dose}_{\text{AIR,per age group}} = \text{C}_{\text{air}} \times \text{EF} \times \left[\frac{\text{BR}}{\text{BW}}\right] \times \text{A} \times \text{CF}$$

where:

Dose_{AIR} = dose by inhalation (mg/kg/day), per age group
C_{air} = concentration of contaminant in air (µg/m3)
EF = exposure frequency (number of days/365 days)
BR/BW = daily breathing rate normalized to body weight (L/kg/day)
A = inhalation absorption factor (default = 1)
CF = conversion factor (1x10-6, µg to mg, L to m3)

To calculate the overall cancer risk, we used the following equation for each appropriate age group:

$$\text{Cancer Risk}_{\text{AIR}} = \text{Dose}_{\text{AIR}} \times \text{CPF} \times \text{ASF} \times \text{FAH} \times \frac{\text{ED}}{\text{AT}}$$

[16] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act." SCAQMD, October 2020, available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf?sfvrsn=19, p. 19; see also "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

[17] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-5 Table 8.3.

[18] "Risk Assessment Procedures." SCAQMD, August 2017, available at: http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.

[19] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 5-24.

where:

$Dose_{AIR}$ = dose by inhalation (mg/kg/day), per age group
CPF = cancer potency factor, chemical-specific $(mg/kg/day)^{-1}$
ASF = age sensitivity factor, per age group
FAH = fraction of time at home, per age group (for residential receptors only)
ED = exposure duration (years)
AT = averaging time period over which exposure duration is averaged (always 70 years)

Consistent with the 671-day construction schedule, the annualized average concentration for construction was used for the entire third trimester of pregnancy (0.25 years) and the first 1.59 years of the infantile stage of life (0 – 2 years). The annual annualized average concentration for operation was used for the remainder of the 30-year exposure period, which makes up the latter 0.41 years of the infantile stage of life, as well as the entire child stage of life (2 – 16 years) and adult stage of life (16 – 30 years). The results of our calculations are shown in the table below.

The Maximally Exposed Individual at an Existing Residential Receptor

Age Group	**Emissions Source**	**Duration** (years)	**Concentration** (ug/m3)	**Cancer Risk**
3rd Trimester	Construction	0.25	0.0093	1.07E-07
	Construction	*1.59*	*0.0093*	*2.06E-06*
	Operation	*0.41*	*0.0391*	*2.25E-06*
Infant (0 - 2)	Total	2		4.30E-06
Child (2 - 16)	Operation	14	0.0391	1.02E-05
Adult (16 - 30)	Operation	14	0.0391	1.57E-06
Lifetime		**30**		**1.62E-05**

The excess cancer risks for the 3rd trimester of pregnancy, infants, children, and adults at the nearest sensitive receptor, over the course of Project construction and operation, are approximately 0.107, 4.3, 10.2, and 1.57 in one million, respectively. The excess cancer risk over the course of the residential lifetime (30 years) is approximately 16.2 in one million. As such, the child and lifetime cancer risks exceed the MDAQMD threshold of 10 in one million, resulting in a potentially significant impact not previously addressed or identified in the SIS/MND.

The purpose of the screening-level HRA is to demonstrate the potential link between Project-generated emissions and adverse health risk impacts. According to the U.S. EPA: [20]

> "EPA's Exposure Assessment Guidelines recommend completing exposure assessments iteratively using a tiered approach to 'strike a balance between the costs of adding detail and refinement to an assessment and the benefits associated with that additional refinement' (U.S. EPA, 1992).
>
> In other words, an assessment using basic tools (e.g., simple exposure calculations, default values, rules of thumb, conservative assumptions) can be conducted as the first phase (or tier) of the overall assessment (i.e., a screening-level assessment).
>
> The exposure assessor or risk manager can then determine whether the results of the screening-level assessment warrant further evaluation through refinements of the input data and exposure assumptions or by using more advanced models."

Our screening-level HRA suggests that the construction and operation of the Project could lead to potentially significant health risks. An EIR should therefore be prepared, incorporating a more refined HRA that thoroughly and accurately assesses the health impacts associated with both the construction and operations phases of the Project. If this more detailed analysis also finds that the Project would result in significant health risks, appropriate mitigation measures, as outlined in the "Feasible Mitigation Measures Available to Reduce Emissions" section below, should be implemented to reduce Project-related particulate matter emissions.

[SWAPE COMMENT #5 SUMMARY]

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

[SWAPE COMMENT #6]

Regarding the implementation of mitigation for proposed projects, CEQA Guidelines § 15096(g)(2) states:

> "When an updated EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment."

The SIS/MND is consequently required under CEQA to implement all feasible mitigation to reduce the Project's potential impacts. As demonstrated in the sections above, the Project would result in potentially significant air quality and health risk impacts that should be mitigated further.

[20] "Exposure Assessment Tools by Tiers and Types - Screening-Level and Refined." U.S. EPA, May 2024, *available at*: https://www.epa.gov/expobox/exposure-assessment-tools-tiers-and-types-screening-level-and-refined.

To reduce the VOC emissions associated with Project construction, we recommend the SIS/MND consider incorporating the following mitigation measure from the CA DOJ:[21]

- Require the use of super compliant, low-VOC paints less than 10 g/L during the architectural coating construction phase and during Project maintenance.

Further mitigation used by other land use development projects to address VOC/ROG emissions is as follows: [22]

- Recycle leftover paint. Take any leftover paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
- Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
- For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain
- Use compliant low-VOC cleaning solvents to clean paint application equipment.
- Keep all paint- and solvent-laden rags in sealed containers to prevent VOC emissions.
- Contractors shall construct/build with materials that do not require painting and use pre-painted construction materials to the extent practicable.
- Use high-pressure/low-volume paint applicators with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.

Los Angeles County recommends:[23]

- If paints and coatings with VOC content of 0 grams/liter to less than 10 grams/liter cannot be utilized, the developer shall avoid application of architectural coatings during the peak smog season: July, August, and September.

While the Project is not located in Los Angeles County, the use of low-VOC paints would nonetheless decrease the Project's significant VOC emissions.

As detailed in the sections above, the Project is anticipated to result in potentially significant construction-related emissions of NO_x and both construction and operational emissions of DPM. According to the U.S. EPA, NO_x emissions typically originate from sources such as internal combustion engines in motor vehicles, as well as fossil fuel-fired electric utility and industrial boilers.[24] OEHHA

[21] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice, September 2022, *available at*: https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf, p. 8 – 10.
[22] "Banning Commerce Center Project." Kimley-Horn and Associates, Inc., June 2024, *available at*: https://ceqanet.opr.ca.gov/2022090102/2; Draft Environmental Impact Report, p. 1-7.
[23] "Mitigation Monitoring and Reporting Program." Los Angeles County Housing Element Update Program EIR. August 2021, *available at*: https://planning.lacounty.gov/wp-content/uploads/2023/07/Housing_final-peir-mitigation-monitoring.pdf.
[24] "Proposed Revisions to the National Ambient Air Quality Standards for Nitrogen Dioxide." EPA, July 2009, *available at*: https://www.gpo.gov/fdsys/pkg/FR-2009-07-15/pdf/E9-15944.pdf.

defines DPM as solid particles produced by exhaust from diesel engines in trucks, buses, trains, ships, and other equipment.[25]

To address these potential impacts, we recommend the Project Applicant consider incorporating several mitigation measures aimed at reducing NO_x and DPM emissions during both the construction and operational phases of the Project (see list below).

CARB recommends the following:[26]

- Ensure the cleanest possible construction practices and equipment are used. This includes eliminating the idling of diesel-powered equipment and providing the necessary infrastructure (e.g., electrical hookups) to support zero and near-zero equipment and tools.
- Implement, and plan accordingly for, the necessary infrastructure to support the zero and near-zero emission technology vehicles and equipment that will be operating on site. Necessary infrastructure may include the physical (e.g., needed footprint), energy, and fueling infrastructure for construction equipment, on-site vehicles and equipment, and medium-heavy and heavy-heavy duty trucks.
- Require all off-road diesel-powered equipment used during construction to be equipped with Tier 4 or cleaner engines, except for specialized construction equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits, such that, emission reductions achieved are equal to or exceed that of a Tier 4 engine.
- Require all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during project construction be battery powered.
- Require all heavy-duty trucks entering the construction site during the grading and building construction phases be model year 2014 or later. All heavy-duty haul trucks should also meet CARB's lowest optional low-oxides of nitrogen (NO_x) standard starting in the year 2022.
- Require all construction equipment and fleets to be in compliance with all current air quality regulations.
- Require tenants to use the cleanest technologies available, and to provide the necessary infrastructure to support zero-emission vehicles and equipment that will be operating on site.
- Require all loading/unloading docks and trailer spaces be equipped with electrical hookups for trucks with transport refrigeration units (TRU) or auxiliary power units.[27]
- Requiring all TRUs entering the project-site be plug-in capable.
- Requiring all service equipment (e.g., yard hostlers, yard equipment, forklifts, and pallet jacks) used within the project site to be zero-emission. This equipment is widely available and can be purchased using incentive funding from CARB's Clean Off-Road Equipment Voucher Incentive Project (CORE).

[25] "Diesel Particulate Matter." OEHHA, *available at*: https://oehha.ca.gov/calenviroscreen/indicator/diesel-particulate-matter.
[26] "Recommended Air Pollution Emission Reduction Measures for Warehouses and Distribution Centers." CARB, August 2023, *available at*: https://ww2.arb.ca.gov/sites/default/files/2023-08/CARB%20Comments%20-%20NOP%20for%20the%20%20Oak%20Valley%20North%20Project%20DEIR.pdf; Attachment A, p. 5 – 8.
[27] Note: The SIS/MND does not specify whether or not Project operation would include cold storage uses.

- Require future tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans.
- Require all heavy-duty trucks entering or on the project site to be zero-emission vehicles and be fully zero-emission. A list of commercially available zero-emission trucks can be obtained from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP). Additional incentive funds can be obtained from the Carl Moyer Program and Voucher Incentive Program.
- Restrict trucks and support equipment from idling longer than two minutes while on site.
- Require the installation of vegetative walls or other effective barriers that separate loading docks and people living or working nearby.

In addition to recommending similar mitigation as the above-mentioned measures from CARB, the CA DOJ suggests:[28]

- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Using electric-powered hand tools, forklifts, and pressure washers, and providing electrical hook ups to the power grid rather than use of diesel-fueled generators to supply their power.
- Designating an area in the construction site where electric-powered construction vehicles and equipment can charge.
- Limiting the amount of daily grading disturbance area.
- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.
- Keeping onsite and furnishing to the lead agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.
- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.

[28] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice, September 2022, *available at*: https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf, p. 8 – 10.

- Oversizing electrical rooms by 25 percent or providing a secondary electrical room to accommodate future expansion of electric vehicle charging capability.
- Constructing and maintaining electric light-duty vehicle charging stations proportional to the number of employee parking spaces (for example, requiring at least 10% of all employee parking spaces to be equipped with electric vehicle charging stations of at least Level 2 charging performance).
- Running conduit to an additional proportion of employee parking spaces for a future increase in the number of electric light-duty charging stations.
- Sequent future projects under the Proposed Project shall install Level 2 EV charging stations in 15% of all parking spaces for multi-family developments and pre-wiring to allow for a Level 2 EV charging stations in all single-family residential garages.

The CalEEMod User's Guide confirms that the methods for mitigating DPM emissions include the use of "alternative fuel, electric equipment, diesel particulate filters, oxidation catalysts, newer tier engines, and dust suppression."[29]

The above discussion provides feasible mitigation measures, drawn from sources such as the CARB and the CA DOJ, to reduce Project-related VOC, NO_x and DPM emissions. These measures present cost-effective options to integrate lower-emission design features into the Project, thereby reducing emissions during construction and operation. An EIR should be prepared that includes all feasible mitigation measures, alongside updated air quality and health risk analyses, to ensure the necessary actions are implemented to achieve the emission reductions to the maximum extent feasible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

[29] "Calculation Details for CalEEMod." CAPCOA, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-a2020-4-0.pdf?sfvrsn=6, Appendix A, p. 60.

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Attachment A: Construction Calculations
Attachment B: CalEEMod Output Files
Attachment C: Health Risk Calculations
Attachment D: AERSCREEN Output Files
Attachment E: Matt Hagemann CV
Attachment F: Paul Rosenfeld CV

Construction Schedule Calculations					
Phase	Default Phase Length	Construction Duration	%	Construction Duration	Revised Phase Length
Site Preparation	20	809	0.0247	371	9
Grading	45	809	0.0556	371	21
Construction	440	809	0.5439	371	202
Paving	35	809	0.0433	371	16
Architectural Coating	35	809	0.0433	371	16

	Total Default Construction Duration	Revised Construction Duration
Start Date	2/14/2024	1/2/2024
End Date	5/3/2026	1/7/2025
Total Days	809	371

Attachment B

15428 - AV3PLC Cordova Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	15428 - AV3PLC Cordova
Construction Start Date	1/2/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.4
Location	34.601219, -117.170978
County	San Bernardino-Mojave Desert
City	Apple Valley
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5160
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	494	1000sqft	11.3	494,000	0.00	—	—	—

User Defined Industrial	494	User Defined Unit	0.00	0.00	0.00	—	—	—
Parking Lot	431	Space	3.88	0.00	0.00	—	—	—
Other Asphalt Surfaces	14.6	Acre	14.6	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.03	5.16	38.0	52.0	0.07	2.09	3.40	5.49	1.93	0.83	2.75	—	11,331	11,331	0.36	0.49	19.2	11,506
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	158	158	156	128	0.28	6.89	37.4	44.3	6.34	12.1	18.5	—	31,419	31,419	1.28	0.50	0.50	31,534
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.6	9.87	31.7	35.4	0.06	1.62	4.41	6.04	1.50	1.33	2.83	—	8,201	8,201	0.29	0.29	4.75	8,300
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.93	1.80	5.78	6.45	0.01	0.30	0.81	1.10	0.27	0.24	0.52	—	1,358	1,358	0.05	0.05	0.79	1,374

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.03	5.16	38.0	52.0	0.07	2.09	3.40	5.49	1.93	0.83	2.75	—	11,331	11,331	0.36	0.49	19.2	11,506
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	158	158	156	128	0.28	6.89	37.4	44.3	6.34	12.1	18.5	—	31,419	31,419	1.28	0.50	0.50	31,534
2025	158	158	2.57	5.35	< 0.005	0.07	0.54	0.62	0.07	0.13	0.19	—	892	892	0.04	0.02	0.06	900
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	10.6	9.87	31.7	35.4	0.06	1.62	4.41	6.04	1.50	1.33	2.83	—	8,201	8,201	0.29	0.29	4.75	8,300
2025	0.93	0.93	0.02	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.33	5.33	< 0.005	< 0.005	0.01	5.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.93	1.80	5.78	6.45	0.01	0.30	0.81	1.10	0.27	0.24	0.52	—	1,358	1,358	0.05	0.05	0.79	1,374
2025	0.17	0.17	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.88	0.88	< 0.005	< 0.005	< 0.005	0.89

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	3.30	2.78	26.4	21.9	0.03	1.36	—	1.36	1.25	—	1.25	—	3,454	3,454	0.14	0.03	—	3,465
Dust From Material Movement	—	—	—	—	—	—	14.2	14.2	—	6.85	6.85	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.65	0.54	< 0.005	0.03	—	0.03	0.03	—	0.03	—	85.2	85.2	< 0.005	< 0.005	—	85.4
Dust From Material Movement	—	—	—	—	—	—	0.35	0.35	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.1	14.1	< 0.005	< 0.005	—	14.1
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.61	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	0.01	< 0.005	0.02	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	0.01	3.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	19.0	16.0	156	124	0.28	6.89	—	6.89	6.34	—	6.34	—	30,595	30,595	1.24	0.25	—	30,699

Dust From Material Movement	—	—	—	—	—	—	36.6	36.6	—	11.9	11.9	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.96	7.15	0.02	0.40	—	0.40	0.36	—	0.36	—	1,760	1,760	0.07	0.01	—	1,766
Dust From Material Movement	—	—	—	—	—	—	2.11	2.11	—	0.69	0.69	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.64	1.31	< 0.005	0.07	—	0.07	0.07	—	0.07	—	291	291	0.01	< 0.005	—	292
Dust From Material Movement	—	—	—	—	—	—	0.38	0.38	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.32	0.39	3.79	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	824	824	0.04	0.03	0.09	834

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.8	48.8	< 0.005	< 0.005	0.09	49.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.08	8.08	< 0.005	< 0.005	0.02	8.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.61	3.87	34.2	32.0	0.05	2.05	—	2.05	1.89	—	1.89	—	5,611	5,611	0.23	0.05	—	5,630
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.61	3.87	34.2	32.0	0.05	2.05	—	2.05	1.89	—	1.89	—	5,611	5,611	0.23	0.05	—	5,630

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.55	2.14	18.9	17.7	0.03	1.14	—	1.14	1.05	—	1.05	—	3,105	3,105	0.13	0.03	—	3,116
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.39	3.45	3.24	0.01	0.21	—	0.21	0.19	—	0.19	—	514	514	0.02	< 0.005	—	516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.29	1.19	1.10	18.7	0.00	0.00	2.71	2.71	0.00	0.64	0.64	—	3,092	3,092	0.13	0.10	12.1	3,137
Vendor	0.13	0.10	2.73	1.23	0.02	0.04	0.69	0.73	0.04	0.19	0.23	—	2,628	2,628	0.01	0.35	7.08	2,738
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	1.06	1.28	12.6	0.00	0.00	2.71	2.71	0.00	0.64	0.64	—	2,735	2,735	0.13	0.10	0.31	2,770
Vendor	0.12	0.09	2.90	1.25	0.02	0.04	0.69	0.73	0.04	0.19	0.23	—	2,631	2,631	0.01	0.35	0.18	2,735
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.59	0.71	7.81	0.00	0.00	1.49	1.49	0.00	0.35	0.35	—	1,559	1,559	0.07	0.06	2.90	1,580
Vendor	0.07	0.05	1.61	0.69	0.01	0.02	0.38	0.40	0.02	0.11	0.13	—	1,455	1,455	< 0.005	0.19	1.69	1,514

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.13	1.43	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	258	258	0.01	0.01	0.48	262
Vendor	0.01	0.01	0.29	0.13	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	241	241	< 0.005	0.03	0.28	251
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.03	1.70	15.6	20.1	0.03	0.78	—	0.78	0.72	—	0.72	—	3,023	3,023	0.12	0.02	—	3,034
Paving	3.03	3.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.68	0.88	< 0.005	0.03	—	0.03	0.03	—	0.03	—	133	133	0.01	< 0.005	—	133
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.02	0.01	0.13	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	21.9	21.9	< 0.005	< 0.005	—	22.0
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.18	1.82	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	396	396	0.02	0.01	0.05	400
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.9	17.9	< 0.005	< 0.005	0.03	18.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.96	2.96	< 0.005	< 0.005	0.01	3.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.36	2.42	3.06	< 0.005	0.08	—	0.08	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	157	157	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.2	13.2	< 0.005	< 0.005	—	13.3
Architectural Coatings	5.84	5.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.19	2.19	< 0.005	< 0.005	—	2.20
Architectural Coatings	1.07	1.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.21	0.26	2.51	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	547	547	0.03	0.02	0.06	554
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	20.9	20.9	< 0.005	< 0.005	0.04	21.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.47	3.47	< 0.005	< 0.005	0.01	3.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.41	0.34	2.35	3.04	< 0.005	0.07	—	0.07	0.07	—	0.07	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	157	157	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.09	2.09	< 0.005	< 0.005	—	2.10
Architectural Coatings	0.92	0.92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.35	0.35	< 0.005	< 0.005	—	0.35
Architectural Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.19	0.22	2.31	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	536	536	0.03	0.02	0.06	543
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.24	3.24	< 0.005	< 0.005	0.01	3.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/2/2024	1/12/2024	5.00	9.00	—
Grading	Grading	1/15/2024	2/12/2024	5.00	21.0	—
Building Construction	Building Construction	2/13/2024	11/20/2024	5.00	202	—
Paving	Paving	11/21/2024	12/12/2024	5.00	16.0	—
Architectural Coating	Architectural Coating	12/13/2024	1/3/2025	5.00	16.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	3.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	12.0	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	5.00	8.00	87.0	0.43
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	6.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction	Crawler Tractors	Diesel	Average	6.00	8.00	87.0	0.43
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	4.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	4.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	4.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	10.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	62.5	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	207	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	81.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	41.5	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT

Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	741,000	247,000	48,297

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	40.0	0.00	—
Grading	—	—	1,050	0.00	—
Paving	0.00	0.00	0.00	0.00	18.5

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
User Defined Industrial	0.00	0%
Parking Lot	3.88	100%
Other Asphalt Surfaces	14.6	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	34.9	annual days of extreme heat
Extreme Precipitation	1.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.99	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	1	1	4
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	88.9
AQ-PM	3.58
AQ-DPM	2.25
Drinking Water	78.9
Lead Risk Housing	30.8

Pesticides	0.00
Toxic Releases	15.4
Traffic	3.76
Effect Indicators	—
CleanUp Sites	96.1
Groundwater	26.4
Haz Waste Facilities/Generators	1.80
Impaired Water Bodies	0.00
Solid Waste	92.8
Sensitive Population	—
Asthma	90.3
Cardio-vascular	96.4
Low Birth Weights	86.0
Socioeconomic Factor Indicators	—
Education	64.3
Housing	18.9
Linguistic	1.81
Poverty	63.5
Unemployment	82.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	27.26806108
Employed	1.514179392
Median HI	33.8380598
Education	—

Bachelor's or higher	25.15077634
High school enrollment	100
Preschool enrollment	13.60195047
Transportation	—
Auto Access	36.01950468
Active commuting	7.724881304
Social	—
2-parent households	69.96022071
Voting	57.46182471
Neighborhood	—
Alcohol availability	88.65648659
Park access	25.95919415
Retail density	2.181444886
Supermarket access	15.69357115
Tree canopy	0.038496086
Housing	—
Homeownership	82.99756191
Housing habitability	23.09765174
Low-inc homeowner severe housing cost burden	48.87719748
Low-inc renter severe housing cost burden	20.73655845
Uncrowded housing	25.95919415
Health Outcomes	—
Insured adults	29.96278712
Arthritis	0.0
Asthma ER Admissions	15.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0

Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	3.7
Cognitively Disabled	26.7
Physically Disabled	6.2
Heart Attack ER Admissions	6.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	45.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	19.0
Elderly	45.2
English Speaking	86.6
Foreign-born	12.2
Outdoor Workers	8.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	97.6
Traffic Density	1.2

Traffic Access	23.0
Other Indices	—
Hardship	68.2
Other Decision Support	—
2016 Voting	69.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	56.0
Healthy Places Index Score for Project Location (b)	15.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	See SWAPE's comment on "Unsubstantiated Changes to Individual Construction Phase Lengths."

Construction: Off-Road Equipment	See SWAPE's comment on "Incorrect Application of Tier 4 Interim Engine Tiers." All other equipment values are consistent with the SIS/MND's model.
Construction: Dust From Material Movement	Consistent with the SIS/MND's model.

Construction				Operation	
2024		**Total**		**Emission Rate**	
Annual Emissions (tons/year)	0.2	Total DPM (lbs)	819.1780822	Annual Emissions (tons/year)	0.07
Daily Emissions (lbs/day)	1.095890411	Total DPM (g)	371579.1781	Daily Emissions (lbs/day)	0.383561644
Construction Duration (days)	365	Emission Rate (g/s)	0.006409367	Total DPM (lbs)	140
Total DPM (lbs)	400	Release Height (meters)	3	Emission Rate (g/s)	0.002013699
Total DPM (g)	181440	Total Acreage	30	Release Height (meters)	3
Start Date	1/2/2024	Max Horizontal (meters)	492.76	Total Acreage	30
End Date	1/1/2025	Min Horizontal (meters)	246.38	Max Horizontal (meters)	492.76
Construction Days	365	Initial Vertical Dimension (meters)	1.5	Min Horizontal (meters)	246.38
2025		Setting	Apple Valley	Initial Vertical Dimension (meters)	1.5
Annual Emissions (tons/year)	0.25	Population	75,036	Setting	Apple Valley
Daily Emissions (lbs/day)	1.369863014	Start Date	1/2/2024	Population	75,036
Construction Duration (days)	306	End Date	11/3/2025		
Total DPM (lbs)	419.1780822	Total Construction Days	671		
Total DPM (g)	190139.1781	Total Years of Construction	1.84		
Start Date	1/1/2025	Total Years of Operation	28.16		
End Date	11/3/2025				
Construction Days	306				

The Maximally Exposed Individual at an Existing Residential Receptor				
Age Group	**Emissions Source**	**Duration** (years)	**Concentration** (ug/m3)	**Cancer Risk**
3rd Trimester	Construction	0.25	0.0093	1.07E-07
	Construction	*1.59*	*0.0093*	*2.06E-06*
	Operation	*0.41*	*0.0391*	*2.25E-06*
Infant (0 - 2)	Total	2		4.30E-06
Child (2 - 16)	Operation	14	0.0391	1.02E-05
Adult (16 - 30)	Operation	14	0.0391	1.57E-06
Lifetime		**30**		**1.62E-05**

AERSCREEN 21112 / AERMOD 21112 11/11/24
08:00:05

TITLE: CordovaBusiness, Construction

********** AREA PARAMETERS **********

SOURCE EMISSION RATE:	0.641E-02	g/s	0.509E-01	lb/hr
AREA EMISSION RATE:	0.528E-07	g/(s-m2)	0.419E-06	lb/(hr-m2)
AREA HEIGHT:	3.00	meters	9.84	feet
AREA SOURCE LONG SIDE:	492.76	meters	1616.67	feet
AREA SOURCE SHORT SIDE:	246.38	meters	808.33	feet
INITIAL VERTICAL DIMENSION:	1.50	meters	4.92	feet
RURAL OR URBAN:	URBAN			
POPULATION:	75036			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

********** BUILDING DOWNWASH PARAMETERS **********

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

********** FLOW SECTOR ANALYSIS **********
25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m3)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	1.000	2.740	10	250.0	WIN

* = worst case diagonal

********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Winter

ALBEDO: 0.35
BOWEN RATIO: 1.50
ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U*) NOT ADUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR	MO	DY	JDY	HR
10	01	10	10	01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50

HT	REF TA	HT
10.0	310.0	2.0

********** AERSCREEN AUTOMATED DISTANCES **********
OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	2.092	2525.00	0.1389

25.00	2.176	2550.00	0.1371
50.00	2.256	2575.00	0.1353
75.00	2.331	2600.00	0.1336
100.00	2.401	2625.00	0.1319
125.00	2.467	2650.00	0.1302
150.00	2.529	2675.00	0.1286
175.00	2.587	2700.00	0.1270
200.00	2.642	2725.00	0.1255
225.00	2.694	2750.00	0.1240
250.00	2.740	2775.00	0.1225
275.00	2.663	2800.00	0.1210
300.00	2.035	2825.00	0.1196
325.00	1.732	2850.00	0.1182
350.00	1.554	2875.00	0.1169
375.00	1.423	2900.00	0.1155
400.00	1.309	2925.00	0.1142
425.00	1.224	2950.00	0.1129
450.00	1.152	2975.00	0.1117
475.00	1.088	3000.00	0.1104
500.00	1.029	3025.00	0.1092
525.00	0.9762	3050.00	0.1080
550.00	0.9273	3075.00	0.1069
575.00	0.8823	3100.00	0.1057
600.00	0.8412	3125.00	0.1046
625.00	0.8032	3150.00	0.1035
650.00	0.7678	3175.00	0.1024
675.00	0.7349	3200.00	0.1014
700.00	0.7045	3225.00	0.1003
725.00	0.6761	3250.00	0.9927E-01
750.00	0.6500	3275.00	0.9826E-01
775.00	0.6248	3300.00	0.9727E-01
800.00	0.6015	3325.00	0.9629E-01
825.00	0.5799	3350.00	0.9533E-01
850.00	0.5593	3375.00	0.9439E-01
875.00	0.5400	3400.00	0.9347E-01
900.00	0.5219	3425.00	0.9256E-01
925.00	0.5047	3450.00	0.9165E-01
950.00	0.4883	3475.00	0.9076E-01
975.00	0.4729	3500.00	0.8989E-01
1000.00	0.4584	3525.00	0.8903E-01
1025.00	0.4447	3550.00	0.8819E-01
1050.00	0.4316	3575.00	0.8735E-01
1075.00	0.4191	3600.00	0.8654E-01
1100.00	0.4071	3625.00	0.8573E-01
1125.00	0.3958	3650.00	0.8494E-01
1150.00	0.3851	3675.00	0.8416E-01
1175.00	0.3749	3700.00	0.8340E-01
1200.00	0.3649	3725.00	0.8265E-01
1225.00	0.3555	3750.00	0.8190E-01
1250.00	0.3465	3775.00	0.8117E-01

1275.00	0.3379	3800.00	0.8045E-01
1300.00	0.3297	3825.00	0.7975E-01
1325.00	0.3219	3850.00	0.7906E-01
1350.00	0.3144	3875.00	0.7837E-01
1375.00	0.3070	3900.00	0.7770E-01
1400.00	0.3000	3925.00	0.7703E-01
1425.00	0.2932	3950.00	0.7638E-01
1450.00	0.2867	3975.00	0.7573E-01
1475.00	0.2804	4000.00	0.7509E-01
1500.00	0.2744	4025.00	0.7447E-01
1525.00	0.2686	4050.00	0.7385E-01
1550.00	0.2631	4075.00	0.7324E-01
1575.00	0.2578	4100.00	0.7264E-01
1600.00	0.2526	4125.00	0.7205E-01
1625.00	0.2476	4150.00	0.7146E-01
1650.00	0.2428	4175.00	0.7089E-01
1675.00	0.2381	4200.00	0.7032E-01
1700.00	0.2336	4225.00	0.6976E-01
1725.00	0.2291	4250.00	0.6921E-01
1750.00	0.2248	4275.00	0.6866E-01
1775.00	0.2207	4300.00	0.6813E-01
1800.00	0.2167	4325.00	0.6760E-01
1825.00	0.2128	4350.00	0.6708E-01
1850.00	0.2091	4375.00	0.6656E-01
1875.00	0.2055	4400.00	0.6605E-01
1900.00	0.2020	4425.00	0.6555E-01
1925.00	0.1986	4450.00	0.6506E-01
1950.00	0.1953	4475.00	0.6457E-01
1975.00	0.1920	4500.00	0.6409E-01
2000.00	0.1889	4525.00	0.6362E-01
2025.00	0.1858	4550.00	0.6315E-01
2050.00	0.1828	4575.00	0.6368E-01
2075.00	0.1799	4600.00	0.6321E-01
2100.00	0.1771	4625.00	0.6274E-01
2125.00	0.1744	4650.00	0.6228E-01
2150.00	0.1717	4675.00	0.6183E-01
2175.00	0.1691	4700.00	0.6138E-01
2200.00	0.1666	4725.00	0.6093E-01
2225.00	0.1642	4750.00	0.6050E-01
2250.00	0.1618	4775.00	0.6006E-01
2275.00	0.1594	4800.00	0.5964E-01
2300.00	0.1571	4825.00	0.5921E-01
2325.00	0.1549	4850.00	0.5880E-01
2350.00	0.1527	4875.00	0.5838E-01
2375.00	0.1506	4900.00	0.5798E-01
2400.00	0.1485	4925.00	0.5758E-01
2425.00	0.1465	4950.00	0.5718E-01
2450.00	0.1445	4975.00	0.5679E-01
2475.00	0.1426	5000.00	0.5640E-01
2500.00	0.1407		

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

3-hour, 8-hour, and 24-hour scaled
concentrations are equal to the 1-hour concentration as referenced in
SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY
IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
under Screening Guidance

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	2.740	2.740	2.740	2.740	N/A
DISTANCE FROM SOURCE	251.00 meters				
IMPACT AT THE AMBIENT BOUNDARY	2.092	2.092	2.092	2.092	N/A
DISTANCE FROM SOURCE	1.00 meters				

TITLE: CordovaBusiness, Operational

********** AREA PARAMETERS **********

SOURCE EMISSION RATE:	0.201E-02	g/s	0.160E-01	lb/hr
AREA EMISSION RATE:	0.166E-07	g/(s-m2)	0.132E-06	lb/(hr-m2)
AREA HEIGHT:	3.00	meters	9.84	feet
AREA SOURCE LONG SIDE:	492.76	meters	1616.67	feet
AREA SOURCE SHORT SIDE:	246.38	meters	808.33	feet
INITIAL VERTICAL DIMENSION:	1.50	meters	4.92	feet
RURAL OR URBAN:	URBAN			
POPULATION:	75036			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

********** BUILDING DOWNWASH PARAMETERS **********

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

********** FLOW SECTOR ANALYSIS **********

25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m3)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	1.000	0.8611	10	250.0	WIN

* = worst case diagonal

********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Winter

ALBEDO: 0.35
BOWEN RATIO: 1.50
ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U*) NOT ADUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR	MO	DY	JDY	HR
10	01	10	10	01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50

HT	REF TA	HT
10.0	310.0	2.0

********** AERSCREEN AUTOMATED DISTANCES **********
OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	0.6576	2525.00	0.4365E-01

25.00	0.6837	2550.00	0.4308E-01
50.00	0.7090	2575.00	0.4253E-01
75.00	0.7326	2600.00	0.4198E-01
100.00	0.7547	2625.00	0.4145E-01
125.00	0.7753	2650.00	0.4093E-01
150.00	0.7948	2675.00	0.4042E-01
175.00	0.8130	2700.00	0.3992E-01
200.00	0.8303	2725.00	0.3944E-01
225.00	0.8467	2750.00	0.3896E-01
250.00	0.8611	2775.00	0.3849E-01
275.00	0.8368	2800.00	0.3804E-01
300.00	0.6394	2825.00	0.3759E-01
325.00	0.5444	2850.00	0.3715E-01
350.00	0.4885	2875.00	0.3672E-01
375.00	0.4471	2900.00	0.3630E-01
400.00	0.4114	2925.00	0.3589E-01
425.00	0.3846	2950.00	0.3549E-01
450.00	0.3621	2975.00	0.3509E-01
475.00	0.3419	3000.00	0.3470E-01
500.00	0.3235	3025.00	0.3432E-01
525.00	0.3068	3050.00	0.3395E-01
550.00	0.2914	3075.00	0.3359E-01
575.00	0.2773	3100.00	0.3323E-01
600.00	0.2644	3125.00	0.3288E-01
625.00	0.2524	3150.00	0.3253E-01
650.00	0.2413	3175.00	0.3219E-01
675.00	0.2310	3200.00	0.3185E-01
700.00	0.2214	3225.00	0.3152E-01
725.00	0.2125	3250.00	0.3120E-01
750.00	0.2043	3275.00	0.3088E-01
775.00	0.1964	3300.00	0.3057E-01
800.00	0.1890	3325.00	0.3026E-01
825.00	0.1823	3350.00	0.2996E-01
850.00	0.1758	3375.00	0.2966E-01
875.00	0.1697	3400.00	0.2937E-01
900.00	0.1640	3425.00	0.2909E-01
925.00	0.1586	3450.00	0.2880E-01
950.00	0.1535	3475.00	0.2852E-01
975.00	0.1486	3500.00	0.2825E-01
1000.00	0.1441	3525.00	0.2798E-01
1025.00	0.1398	3550.00	0.2771E-01
1050.00	0.1356	3575.00	0.2745E-01
1075.00	0.1317	3600.00	0.2720E-01
1100.00	0.1279	3625.00	0.2694E-01
1125.00	0.1244	3650.00	0.2669E-01
1150.00	0.1210	3675.00	0.2645E-01
1175.00	0.1178	3700.00	0.2621E-01
1200.00	0.1147	3725.00	0.2597E-01
1225.00	0.1117	3750.00	0.2574E-01
1250.00	0.1089	3775.00	0.2551E-01

1275.00	0.1062	3800.00	0.2528E-01
1300.00	0.1036	3825.00	0.2506E-01
1325.00	0.1012	3850.00	0.2484E-01
1350.00	0.9879E-01	3875.00	0.2463E-01
1375.00	0.9649E-01	3900.00	0.2442E-01
1400.00	0.9427E-01	3925.00	0.2421E-01
1425.00	0.9213E-01	3950.00	0.2400E-01
1450.00	0.9009E-01	3975.00	0.2380E-01
1475.00	0.8812E-01	4000.00	0.2360E-01
1500.00	0.8624E-01	4025.00	0.2340E-01
1525.00	0.8443E-01	4050.00	0.2321E-01
1550.00	0.8268E-01	4075.00	0.2302E-01
1575.00	0.8101E-01	4100.00	0.2283E-01
1600.00	0.7939E-01	4125.00	0.2264E-01
1625.00	0.7783E-01	4150.00	0.2246E-01
1650.00	0.7630E-01	4175.00	0.2228E-01
1675.00	0.7482E-01	4200.00	0.2210E-01
1700.00	0.7340E-01	4225.00	0.2192E-01
1725.00	0.7201E-01	4250.00	0.2175E-01
1750.00	0.7066E-01	4275.00	0.2158E-01
1775.00	0.6936E-01	4300.00	0.2141E-01
1800.00	0.6811E-01	4325.00	0.2124E-01
1825.00	0.6689E-01	4350.00	0.2108E-01
1850.00	0.6571E-01	4375.00	0.2092E-01
1875.00	0.6457E-01	4400.00	0.2076E-01
1900.00	0.6347E-01	4425.00	0.2060E-01
1925.00	0.6240E-01	4450.00	0.2045E-01
1950.00	0.6136E-01	4475.00	0.2029E-01
1975.00	0.6035E-01	4500.00	0.2014E-01
2000.00	0.5936E-01	4525.00	0.1999E-01
2025.00	0.5840E-01	4550.00	0.1984E-01
2050.00	0.5746E-01	4575.00	0.2001E-01
2075.00	0.5655E-01	4600.00	0.1986E-01
2100.00	0.5567E-01	4625.00	0.1972E-01
2125.00	0.5480E-01	4650.00	0.1957E-01
2150.00	0.5397E-01	4675.00	0.1943E-01
2175.00	0.5315E-01	4700.00	0.1929E-01
2200.00	0.5236E-01	4725.00	0.1915E-01
2225.00	0.5159E-01	4750.00	0.1901E-01
2250.00	0.5084E-01	4775.00	0.1888E-01
2275.00	0.5010E-01	4800.00	0.1874E-01
2300.00	0.4938E-01	4825.00	0.1861E-01
2325.00	0.4868E-01	4850.00	0.1848E-01
2350.00	0.4800E-01	4875.00	0.1835E-01
2375.00	0.4733E-01	4900.00	0.1822E-01
2400.00	0.4668E-01	4925.00	0.1809E-01
2425.00	0.4604E-01	4950.00	0.1797E-01
2450.00	0.4542E-01	4975.00	0.1785E-01
2475.00	0.4482E-01	5000.00	0.1772E-01
2500.00	0.4423E-01		

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

3-hour, 8-hour, and 24-hour scaled
concentrations are equal to the 1-hour concentration as referenced in
SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY
IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
under Screening Guidance

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	0.8612	0.8612	0.8612	0.8612	N/A
DISTANCE FROM SOURCE	251.00 meters				
IMPACT AT THE AMBIENT BOUNDARY	0.6576	0.6576	0.6576	0.6576	N/A
DISTANCE FROM SOURCE	1.00 meters				

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

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
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 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. 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) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- 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 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, 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 more than 100 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- 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.

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.

- 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.
- 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.

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.

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 is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

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.

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.

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.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Focus on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years of experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Rosenfeld P. E., Spaeth K., Hallman R., Bressler R., Smith, G., (2022) Cancer Risk and Diesel Exhaust Exposure Among Railroad Workers. *Water Air Soil Pollution.* **233,** 171.

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

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Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

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Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

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Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

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Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the Superior Court of the State of California, County of San Bernardino
Billy Wildrick, Plaintiff vs. BNSF Railway Company
Case No. CIVDS1711810
Rosenfeld Deposition 10-17-2022

In the State Court of Bibb County, State of Georgia
Richard Hutcherson, Plaintiff vs Norfolk Southern Railway Company
Case No. 10-SCCV-092007
Rosenfeld Deposition 10-6-2022

In the Civil District Court of the Parish of Orleans, State of Louisiana
Millard Clark, Plaintiff vs. Dixie Carriers, Inc. et al.
Case No. 2020-03891
Rosenfeld Deposition 9-15-2022

In The Circuit Court of Livingston County, State of Missouri, Circuit Civil Division
Shirley Ralls, Plaintiff vs. Canadian Pacific Railway and Soo Line Railroad
Case No. 18-LV-CC0020
Rosenfeld Deposition 9-7-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jonny C. Daniels, Plaintiff vs. CSX Transportation Inc.
Case No. 20-CA-5502
Rosenfeld Deposition 9-1-2022

In The Circuit Court of St. Louis County, State of Missouri
Kieth Luke et. al. Plaintiff vs. Monsanto Company et. al.
Case No. 19SL-CC03191
Rosenfeld Deposition 8-25-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jeffery S. Lamotte, Plaintiff vs. CSX Transportation Inc.
Case No. NO. 20-CA-0049
Rosenfeld Deposition 8-22-2022

In State of Minnesota District Court, County of St. Louis Sixth Judicial District
Greg Bean, Plaintiff vs. Soo Line Railroad Company
Case No. 69-DU-CV-21-760
Rosenfeld Deposition 8-17-2022

In United States District Court Western District of Washington at Tacoma, Washington
John D. Fitzgerald Plaintiff vs. BNSF
Case No. 3:21-cv-05288-RJB
Rosenfeld Deposition 8-11-2022

In Circuit Court of the Sixth Judicial Circuit, Macon Illinois
Rocky Bennyhoff Plaintiff vs. Norfolk Southern
Case No. 20-L-56
Rosenfeld Deposition 8-3-2022

In Court of Common Pleas, Hamilton County Ohio
Joe Briggins Plaintiff vs. CSX
Case No. A2004464
Rosenfeld Deposition 6-17-2022

In the Superior Court of the State of California, County of Kern
George LaFazia vs. BNSF Railway Company.
Case No. BCV-19-103087
Rosenfeld Deposition 5-17-2022

In the Circuit Court of Cook County Illinois
Bobby Earles vs. Penn Central et. al.
Case No. 2020-L-000550
Rosenfeld Deposition 4-16-2022

In United States District Court Easter District of Florida
Albert Hartman Plaintiff vs. Illinois Central
Case No. 2:20-cv-1633
Rosenfeld Deposition 4-4-2022

In the Circuit Court of the 4th Judicial Circuit, in and For Duval County, Florida
Barbara Steele vs. CSX Transportation
Case No.16-219-Ca-008796
Rosenfeld Deposition 3-15-2022

In United States District Court Easter District of New York
Romano et al. vs. Northrup Grumman Corporation
Case No. 16-cv-5760
Rosenfeld Deposition 3-10-2022

In the Circuit Court of Cook County Illinois
Linda Benjamin vs. Illinois Central
Case No. No. 2019 L 007599
Rosenfeld Deposition 1-26-2022

In the Circuit Court of Cook County Illinois
Donald Smith vs. Illinois Central
Case No. No. 2019 L 003426
Rosenfeld Deposition 1-24-2022

In the Circuit Court of Cook County Illinois
Jan Holeman vs. BNSF
Case No. 2019 L 000675
Rosenfeld Deposition 1-18-2022

In the State Court of Bibb County State of Georgia
Dwayne B. Garrett vs. Norfolk Southern
Case No. 20-SCCV-091232
Rosenfeld Deposition 11-10-2021

In the Circuit Court of Cook County Illinois
Joseph Ruepke vs. BNSF
Case No. 2019 L 007730
Rosenfeld Deposition 11-5-2021

In the United States District Court For the District of Nebraska
Steven Gillett vs. BNSF
Case No. 4:20-cv-03120
Rosenfeld Deposition 10-28-2021

In the Montana Thirteenth District Court of Yellowstone County
James Eadus vs. Soo Line Railroad and BNSF
Case No. DV 19-1056
Rosenfeld Deposition 10-21-2021

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al.cvs. Cerro Flow Products, Inc.
Case No. 0i9-L-2295
Rosenfeld Deposition 5-14-2021
Trial October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a AMTRAK,
Case No. 18-L-6845
Rosenfeld Deposition 6-28-2021

In the United States District Court For the Northern District of Illinois
Theresa Romcoe vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail
Case No. 17-cv-8517
Rosenfeld Deposition 5-25-2021

In the Superior Court of the State of Arizona In and For the Cunty of Maricopa
Mary Tryon et al. vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case No. CV20127-094749
Rosenfeld Deposition 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al vs. CNA Insurance Company et al.
Case No. 1:17-cv-000508
Rosenfeld Deposition 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, Plaintiff, vs. Marathon Petroleum, LP, Defendant.
Case No. 1716-CV10006
Rosenfeld Deposition 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, Plaintiffs, vs. United States Metals Refining Company et. al. Defendant.
Case No. 2:17-cv-01624-ES-SCM
Rosenfeld Deposition 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" Defendant.
Case No. 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No. BC615636
Rosenfeld Deposition 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No. BC646857
Rosenfeld Deposition 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiffs vs. The 3M Company et al., Defendants
Case No. 1:16-cv-02531-RBJ
Rosenfeld Deposition 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No. 1923
Rosenfeld Deposition 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintifs vs. Chevron Corporation, et al., Defendants
Cause No. C12-01481
Rosenfeld Deposition 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case No. 1:19-cv-00315-RHW
Rosenfeld Deposition 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No. LC102019 (c/w BC582154)
Rosenfeld Deposition 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., Plaintiffs, vs. Meritor Inc., et al., Defendants
Case No. 4:16-cv-52-DMB-JVM
Rosenfeld Deposition July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No. RG14711115
Rosenfeld Deposition September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No. LALA002187
Rosenfeld Deposition August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action No. 14-C-30000
Rosenfeld Deposition June 2015

In The Iowa District Court for Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No. 4980
Rosenfeld Deposition May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case No. CACE07030358 (26)
Rosenfeld Deposition December 2014

In the County Court of Dallas County Texas
Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.
Case No. cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., Plaintiffs, vs. Republic Services, Inc., et al., Defendants
Case No. 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., Plaintiffs, vs. International Paper Company, Defendant.
Civil Action No. 2:09-cv-232-WHA-TFM
Rosenfeld Deposition July 2010, June 2011

In the Circuit Court of Jefferson County Alabama
Jaeanette Moss Anthony, et al., Plaintiffs, vs. Drummond Company Inc., et al., Defendants
Civil Action No. CV 2008-2076
Rosenfeld Deposition September 2010

In the United States District Court, Western District Lafayette Division
Ackle et al., Plaintiffs, vs. Citgo Petroleum Corporation, et al., Defendants.
Case No. 2:07CV1052
Rosenfeld Deposition July 2009

Golden State Environmental Justice Alliance
Green Jobs & Clean Communities
P.O. Box 79222
Corona, CA 92877

December 6, 2024

Richard Hirsch
Town of Apple Valley
rhirsch@interwestgrp.com

Re: SPR 2023-006, CORDOVA BUSINESS CENTER DEVELOPMENT PROJECT, SCH Number 2024100839

Dear Mr. Hirsch:

On behalf of the Golden State Environmental Justice Alliance ("GSEJA"), I am writing to you regarding the SPR 2023-006, CORDOVA BUSINESS CENTER DEVELOPMENT PROJECT, SCH Number 2024100839 ("Project").

GSEJA is withdrawing its comment letter, appeal, and/or opposition on/to the Project. The Project's developer has addressed GSEJA's concerns about environmental mitigation.

Joe Bourgeois
Executive Director

ATTACHMENT 2

CORDOVA BUSINESS CENTER CONSTRUCTION AND OPERATIONAL HEALTH RISK ASSESSMENT (HRA)