FINAL

Environmental Impact Report

Apple Valley 143 Project

State Clearinghouse No. 2022070019

NOVEMBER 2023

Prepared for:

TOWN OF APPLE VALLEY, PLANNING DEPARTMENT
14955 Dale Evans Parkway
Apple Valley, California 92307

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APPENDICES

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1 Introduction

1.1 Introduction

This Final Environmental Impact Report (EIR) was prepared for the Apple Valley 143 Project (Project) in accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code Sections 21000-21177).

Project Overview

The Project includes the construction and operation of 3 industrial/warehouse buildings totaling approximately 2,520,000 square feet on approximately 143 acres. Building 1, the southernmost building, would be approximately 615,000 square feet, Building 2, the center building, would be approximately 1,222,500 square feet, and Building 3, the northernmost building, would be approximately 682,500 square feet. The Project would involve associated improvements, including loading docks, truck and vehicle parking, and landscaped areas. The Project would also include several off-site utility and public street improvements, including improvements along Stoddard Wells Road and Johnson Road, including frontage landscaping and pedestrian improvements, as well as installation of or upsizing of water and sewer lines in the immediate vicinity of the Project site. The Project would also involve the off-site construction of Outer I-15 Road on the eastern boundary of the Project Site. This would be a public road once constructed. A detailed description of the Project is contained in the Draft EIR in Chapter 3, Project Description. As described below, the Draft EIR is incorporated herein as part of the Final EIR but provided under a separate cover.

Contents and Use of a Final EIR

As described in CEQA and the CEQA Guidelines, public agencies are charged with the duty to avoid or substantially lessen significant environmental effects, with consideration of other conditions, including economic, social, technological, legal, and other benefits. As required by CEQA, this Final EIR assesses the significant direct and indirect environmental effects of the Project, as well as the significant cumulative impacts that could occur from implementation of the Project. This Final EIR is an informational document only, the purpose of which is to identify the significant effects of the Project on the environment; to indicate how those significant effects could be avoided or significantly lessened, including feasible mitigation measures; to identify any significant and unavoidable adverse impacts that cannot be mitigated to less than significant; and to identify reasonable and feasible alternatives to the Project that would avoid or substantially lessen any significant adverse environmental effects associated with the Project and achieve the fundamental objectives of the Project.

Before approving a project, CEQA requires the lead agency to prepare and certify a Final EIR. The contents of a Final EIR are specified in Section 15132 of the CEQA Guidelines, as follows:

1. The draft EIR or a revision of the draft.
2. Comments and recommendations received on the draft EIR either verbatim or in summary.
3. A list of persons, organizations, and public agencies commenting on the draft EIR.
4. The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
5. Any other information added by the Lead Agency.

In accordance with the above-listed requirements, this Final EIR for the Project incorporates the publicly circulated Draft EIR, which is provided under a separate cover, and consists of the following:

1. All agency and public comments received during the public review comment period for the Project.
2. Responses to public comments.
3. Changes to the Draft EIR since it was circulated for public review.
4. The Project's Mitigation Monitoring and Reporting Program.

This Final EIR, in combination with the Draft EIR, as amended by text changes, constitute the EIR that will be considered for certification by the Town and may be used to support approval of the proposed Project, either in whole or in part, or one of the alternatives to the Project discussed in the Draft EIR.

As required by Section 15090 (a) (1)-(3) of the CEQA Guidelines, a lead agency, in certifying a Final EIR, must make the following three determinations:

1. The Final EIR has been completed in compliance with CEQA.
2. The Final EIR was presented to the decision-making body of the lead agency, and the decision-making body reviewed and considered the information in the Final EIR prior to approving the project.
3. The Final EIR reflects the lead agency's independent judgment and analysis.

As required by Section 15091 of the CEQA Guidelines, no public agency can approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings (Findings of Fact) for each of those significant effects, accompanied by a brief explanation of the rationale for each finding, supported by substantial evidence in the record. The possible findings are as follows:

1. Changes or alterations have been required in or incorporated into the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

Additionally, pursuant to Section 15093(b) of the CEQA Guidelines, when a lead agency approves a project that would result in significant unavoidable impacts that are disclosed in the Final EIR, the agency must state in writing the reasons supporting the action. The Statement of Overriding Considerations must be supported by substantial evidence in the lead agency's administrative record.

The Draft Findings of Fact and Statement of Overriding Considerations are provided as a separate document that may be considered for adoption by the Town at the time at which the Project is considered.

1.2 Contents and Organization

The Final EIR will be used by the Town as an informational document for the proposed Project. The Final EIR, in compliance with Section 15132 of the CEQA Guidelines, is organized as follows:

Chapter 1, Introduction. This chapter provides general information on, and the procedural compliance of, the proposed Project and the Final EIR.

Chapter 2, Changes to the Draft Environmental Impact Report. This chapter contains a summary of changes made to the document since publication of the Draft EIR as a result of comments received. Revisions clarify information presented in the Draft EIR, and only minor technical changes or additions have been made. These text changes provide additional clarity in response to comments received on the Draft EIR, but do not change the significance of the conclusions presented in the Draft EIR. Changes are signified by strikeout text (i.e., ~~strikeout~~) where text was removed and by underlined text (i.e., underline) where text was added.

Chapter 3, Response to Comments. This chapter includes a list of public agencies and individuals who provided comments on the Draft EIR during the public review period. Appendix A includes the comments received on environmental issues raised during the public review process for the Draft EIR and the Town's responses to these comments are in Chapter 3. Each comment letter is numbered and presented with brackets indicating how the letter has been divided into individual comments. Each comment is given a binomial with the number of the comment letter appearing first, followed by the comment number. For example, comments in Letter 1 are numbered 1-1, 1-2, 1-3, and so on. Responses to specific comments are included in Chapter 3 of this Final EIR, each with binomials that correspond to the bracketed comments.

Chapter 4, Mitigation Monitoring and Reporting Program. This chapter provides the Mitigation Monitoring and Reporting Program for the proposed Project. The Mitigation Monitoring and Reporting Program is presented in table format and identifies mitigation measures for the proposed Project, the party responsible for implementing the mitigation measures, the timing of implementing the mitigation measures, and the monitoring and reporting procedures for each mitigation measure. Project design features that were identified in the EIR are also included in this chapter to verify that these features are incorporated within the Project.

Draft EIR (Under Separate Cover). This Final EIR incorporates the Draft EIR as circulated during public review. The Draft EIR includes a detailed description of the Project, an analysis of the Project's environmental impacts, and a discussion of alternatives to the Project. The Draft EIR is available for review on the Town's website at https://www.applevalley.org/services/planning-division/environmental. Copies of the Draft EIR are also available for public review at the following locations:

Apple Valley Town Hall, Planning Department
14955 Dale Evans Parkway
Apple Valley, California 92307

1.3 California Environmental Quality Act Review

In accordance with Section 15082 of the CEQA Guidelines, the Town released an Initial Study and Notice of Preparation on July 1, 2022, for the required 30-day review period to interested agencies, organizations, and individuals. The purpose of the Notice of Preparation is to provide notification that an EIR for the Project was being prepared, and to solicit guidance on the scope and content of the document. The Notice of Preparation was sent to the State Clearinghouse at the California Governor's Office of Planning and Research. The State Clearinghouse assigned a state

identification number (SCH No. 2022070019) to the Project. The Notice of Preparation was also posted at the County Clerk's office and on the Town's website at https://www.applevalley.org/services/planning-division/environmental. Copies of the Notice of Preparation were distributed to all applicable agencies and tribes on the Town's noticing list, as well as surrounding property owners within 900 feet of the Project site. Hard copies of the Initial Study and Notice of Preparation were made available for review at both the Town's Planning Department, located at 14955 Dale Evans Parkway, Apple Valley, California 92307, and at the San Bernardino County Library, located at 14901 Dale Evans Parkway, Apple Valley, California 92307. A public scoping meeting was held on July 19, 2022, at Apple Valley Town Hall to gather additional public input on the scope of the environmental document. During the scoping meeting, the Town did not receive any substantive comments on the scope of the environmental analysis to be included in the Draft EIR.

The 30-day public scoping period ended on August 1, 2022. Comments received during the 30-day public scoping period were considered during preparation of the Draft EIR. Copies of the comment letters received in 2022 are provided in Appendix A of the Draft EIR, and included comments from the following:

- City of Victorville
- United States Department of Interior – U.S. Fish and Wildlife Service
- California Department of Fish and Wildlife
- Richard Bunck
- Southwest Regional Council of Carpenters
- Californians Allied for a Responsible Economy ("CARE CA")

Comments focused on potential impacts and issues related to the air quality, biological resources, and transportation. Issues, concerns, and potential impacts raised in comment letters received during the 2022 public scoping period were discussed and addressed in the Draft EIR, and no further response to these comments is needed in this Final EIR.

A Notice of Availability of the Draft EIR was sent to agencies and interested parties on August 16, 2023, and the Draft EIR was circulated for a public review period from August 16, 2023, through October 2, 2023. The Notice of Availability was also posted at the County Clerk's office and both the Notice of Availability and Draft EIR were posted on the Town's website. Copies of the Notice of Availability were distributed to all applicable agencies and tribes on the Town's noticing list, as well as surrounding property owners within 900 feet of the Project site. Hard copies of the Draft EIR were made available for review at both the Town's Planning Department, located at 14955 Dale Evans Parkway, Apple Valley, California 92307, and at the San Bernardino County Library, located at 14901 Dale Evans Parkway, Apple Valley, California 92307.

The Town received five comment letters during the 2023 Draft EIR public review period, and one comment letter was received after the Draft EIR public review period. A list of the comments received and responses to comments are included in Chapter 3 of this Final EIR. Appendix A contains copies of the comment letters received.

Per CEQA Guidelines Section 15088, responses to comments submitted by public agencies are required to be provided to the commenting agency at least 10 days prior to the public hearing at which the EIR and Project will be considered. However, no comments were received by the Town from public agencies. Notwithstanding, the Town has distributed a NOA of a Final EIR to all parties that were previously provided a NOA of the Draft EIR, as well as parties that commented on the Draft EIR. The Town has also posted this Final EIR on the Town's website. Hard copies of the Final EIR were made available for review at the Town's Planning Department, located at 14955 Dale Evans Parkway, Apple Valley, California 92307.

2 Changes to the Draft Environmental Impact Report

2.1 Introduction

As provided in Section 15088(c) of the CEQA Guidelines, responses to comments may take the form of a revision to a Draft EIR or may be a separate section in the Final EIR. This chapter complies with the latter option and provides changes to the Draft EIR in this chapter shown as strikethrough text (i.e., ~~strikethrough~~) signifying deletions and underlined text (i.e., underline) signifying additions. These changes are meant to provide clarification, corrections, or minor revisions made to the Draft EIR initiated by the Lead Agency, Town of Apple Valley, reviewing agencies, the public, and/or consultants based on their review. Text changes are presented in the section and page order in which they appear in the Draft EIR. None of the corrections or additions constitutes significant new information or substantial project changes that, in accordance with CEQA Guidelines Section 15088.5, would trigger the need to recirculate portions or all of the Draft EIR.

2.2 Changes to the Draft Environmental Impact Report

2.2.1 Chapter 1, Executive Summary

Section 1.6, Summary of Impacts: Table 1-1, Summary of Project Impacts, (pages 1-5 through 1-8):

Air Quality			
Would the Project conflict with or obstruct implementation of the applicable air quality plan?	Potentially significant impact	**MM-AQ-1.** The Project shall utilize "Super-Compliant" low-volatile organic compound (VOC) paints which have been reformulated to exceed the regulatory VOC limits put forth by MDAQMD's Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. Alternatively, the Project Applicant may utilize tilt-up concrete buildings that do not require the use of architectural coatings. **MM-AQ-2.** The following measures shall be implemented to reduce off-road equipment exhaust <u>and off-site mobile source emissions</u> during construction:	Significant and unavoidable impact

Air Quality			
		▪ Require all generators, and all diesel-fueled off-road construction equipment greater than 75 horsepower, to be zero-emissions or equipped with California Air Resources Board (CARB) Tier 4 Final compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. An exemption from these requirements may be granted by the Town of Apple Valley in the event that the applicant documents that equipment with the required tier is not reasonably available and corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment (for example, another piece of equipment can be replaced with a zero-emission equipment to offset the emissions associated with using a piece of equipment that does not meet Tier 4 Final standards). Before an exemption may be considered by the Town, the applicant shall be required to demonstrate that at least two construction fleet owners/operators in the San Bernadino Region were contacted and that those owners/operators confirmed Tier 4 Final or better equipment could not be located within the San Bernardino Region. To ensure that Tier 4 Final construction equipment or better would be used during the proposed Project's construction, the applicant shall include this requirement in applicable bid documents, purchase orders, and contracts. Successful contractors must demonstrate the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities. ▪ Provide infrastructure for zero-emission off-road construction equipment if the contractors selected to construct the Project plan to use zero-emission off-road construction equipment.	

Air Quality			
		▪ Provide electrical hook ups to the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills and compressors. In applicable bid documents and contracts with contractors selected to construct the Project, include language requiring all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers, etc.) used during Project construction to be electric. ▪ Require construction equipment to be turned off when not in use. ▪ Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11. ▪ Prohibit off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day, as feasible. ▪ Designate an area in the construction site where electric-powered construction vehicles and equipment can charge, as feasible. ▪ Keep on site 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, as feasible. ▪ Conduct an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts, as feasible. ▪ Provide information on transit and ridesharing programs and services to construction employees, as feasible. ▪ Provide meal options on site or shuttles between the facility and nearby meal destinations for construction employees, as feasible. **MM-AQ-3.** The Project shall implement the following measures in order to reduce operational off-road equipment, stationary source, and on-road vehicle air pollutant emissions to the extent feasible: ▪ All cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and landscaping equipment) shall be zero-emission vehicles. Each building shall include the necessary charging stations or other necessary infrastructure for cargo handling equipment. The building manager or their	

Air Quality			
		designee shall be responsible for enforcing these requirements. ▪ All diesel-fueled emergency generators shall be equipped with California Air Resources Board (CARB) Tier 4 Final compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. ▪ Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the Town of Apple Valley demonstrating that occupants/tenants of the Project site have been provided documentation on funding opportunities, such as the Carl Moyer Program, that provide incentives for using cleaner-than-required engines and equipment. ▪ Prior to certificate of occupancy, install conduit and infrastructure for Level 2 (or faster) electric vehicle charging stations on-site for employees for the percentage of employee parking spaces commensurate with Title 24 requirements in effect at the time of building permit issuance plus additional charging stations equal to 5% of the total employee parking spaces in the building permit, whichever is greater. By 2030 install Level 2 (or faster) electric vehicle charging stations for 25% of the employee parking spaces required. ▪ Conduit shall be installed to tractor trailer parking areas in logical locations determined by the Project Applicant during construction document plan check, for the purpose of accommodating the future installation of electric truck charging stations at such time this technology becomes commercially available. ▪ In anticipation of a transition to zero emissions truck fleets during the lifetime of the Project, install at least four heavy-duty truck vehicle charging stations on-site by 2030. ▪ <u>Require all heavy-duty vehicles engaged in drayage to or from the Project site to be zero emission beginning in 2030, as feasible.</u> ▪ <u>Require tenants to use zero-emission light- and medium-duty vehicles as part of business operations, as feasible.</u> ▪ <u>Provide meal options on site or shuttles between the facility and nearby meal destinations, as feasible.</u>	

Air Quality			
		▪ Post signs at every truck exit driveway providing directional information to the truck route. ▪ Improve and maintain vegetation and tree canopy for residents in and around the Project area in accordance with the approved landscaping plan. ▪ Include contractual language in tenant lease agreements requiring that any facility operator shall: - For occupants with more than 250 employees, require the establishment of a transportation demand management program to reduce employee commute vehicle emissions; - Place legible, durable, weather-proof signs at truck access gates, loading docks, and truck parking areas that identify applicable CARB anti-idling regulations. At a minimum, each sign shall include: (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and (3) telephone numbers of the building facilities manager and CARB to report violations. Prior to the issuance of an occupancy permit, the Town of Apple Valley shall conduct a site inspection to ensure that the signs are in place; - Ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at CARB-approved courses (such as the free, one-day Course #512); - Be required to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. The building manager or their designee shall be responsible for enforcing these requirements; - Be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program (PSIP), and the Statewide Truck and Bus Regulation. - Train staff in charge of keeping vehicle records in diesel technologies and	

Air Quality			
		compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request; - Enroll in the U.S. Environmental Protection Agency's SmartWay program, and if tenant owns, operates, or hires trucking carriers with more than 10 trucks to use carriers that are SmartWay carriers, as feasible. **MM-AQ-4.** Cold storage operations shall be limited to a maximum of 15% of the total building square footage unless additional environmental review, including a Health Risk Assessment, is conducted and certified pursuant to the California Environmental Quality Act. **MM-AQ-5.** Any operations requiring cold storage shall also require installation of electrical hook-ups for transport refrigeration units (TRUs) at all associated warehouse dock doors. Truck operators with TRUs shall be required to utilize electric plug-in units for refrigeration at loading docks and shall limit TRU idling to 30 minutes or less. **MM-AQ-6.** Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the Town of Apple Valley demonstrating that the occupants of the Project site have been provided documentation that: ▪ Recommends the use of electric or alternatively fueled sweepers with high efficiency particulate air (HEPA) filters. ▪ Recommends the use of water-based or low-volatile organic compound (VOC) cleaning. ▪ For occupants with more than 250 employees, require the establishment of a transportation demand management program to reduce employee commute vehicle emissions. **MM-AQ-7.** The Project shall be designed to: ▪ Be able to achieve Leadership in Energy and Environmental Design (LEED) certification and meet or exceed California Green Building Standards (CalGreen) Tier 2 standards in effect at the time of building permit application. Documentation shall be provided to the Town of Apple Valley demonstrating that the Project meets this requirement prior to the issuance of building permits.	

Air Quality			
		▪ Include the application of surface treatments (such as PURETi Coat or PlusTi) on impervious ground surfaces that lessen impervious surface-related radiative forcing. ▪ Include high efficiency particulate air (HEPA) air filtration systems within in all warehouse facilities.	
Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	Potentially significant impact	MM-AQ-1 MM-AQ-2 MM-AQ-3 MM-AQ-4 MM-AQ-5 MM-AQ-6 MM-AQ-7	Significant and unavoidable impact
Would the Project expose sensitive receptors to substantial pollutant concentrations?	Potentially significant impact	MM-AQ-3 MM-AQ-4 MM-AQ-5 MM-AQ-6 MM-AQ-7	Significant and unavoidable impact
Would the Project have a cumulative effect on air quality resources?	Potentially significant impact	MM-AQ-1 MM-AQ-2 MM-AQ-3 MM-AQ-4 MM-AQ-5 MM-AQ-6 MM-AQ-7	Significant and unavoidable impact

Section 1.6, Summary of Impacts: Significant and Unavoidable Impacts, (page 1-26).

As identified in Table 1-1, the Project would result in significant and unavoidable impacts with regard to air quality, greenhouse gas emissions, and transportation. These impacts are discussed in further detail below.

- Air Quality. The Project would exceed the numerical thresholds of significance established by the Mojave Desert Air Quality Management District for emissions of oxides of nitrogen, and particulate matter with an aerodynamic diameter less than or equal to 10 microns. As such, the Project would potentially result in health effects associated with those pollutants. Although mitigation measures have been recommended to minimize operational-related air quality impacts (MM-AQ-1, MM-AQ-2, ~~and~~ MM-AQ-3, MM-AQ-4, MM-AQ-5, MM-AQ-6, and MM-AQ-7), no feasible mitigation measures or Project design features beyond those already identified exist that would reduce these emissions to levels that are less than significant. Therefore, even with the incorporation of mitigation, long-term impacts associated with a cumulatively considerable net increase of criteria pollutants for which the Project region is non-attainment would be significant and unavoidable, as would their potential health effects. On this basis, the Project is considered to potentially conflict with the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert Air Basin.

2.2.2 Section 4.2, Air Quality

Project Design Feature

Location: Section 4.2.3, Thresholds of Significance (pp. 4.2-22)

Explanation for Change and Discussion:

A comment received from the MDAQMD recommended the Town require measures to control dust during construction. Of note, compliance with MDAQMD Rules and Regulations, including Rule 403 for fugitive dust control, was included in the analysis and particulate matter emissions would not exceed the MDAQMD thresholds of significance, as depicted in Table 4.2-9 of the Draft EIR. As particulate matter emissions would not be potentially significant, mitigation is not required. However, to be responsive to the MDAQMD comment, Project Design Feature (PDF) AQ-1 was added. This PDF would not change the results or conclusions provided in the Draft EIR.

Changes:

Methodology

Project Design Features

The following project design features (PDFs) would be included as part of the Project:

PDF-AQ-1 Comply with all applicable Rules and Regulations of the MDAQMD including, but not limited to, Rules 401 (Visible Emissions), 402 (Nuisance), and 403 (Fugitive Dust). To ensure compliance with these Rules and Regulations, the Project Applicant or successor in interest shall prepare and submit a Dust Control Plan to the MDAQMD for approval. The Dust Control Plan shall document the best management practices (BMPs) that will be implemented during Project construction to prevent, to the maximum extent practicable, wind and soil erosion. BMPs that will be included in the Dust Control Plan shall include, but are not limited to, the following:

- Signage compliant with Rule 403 (Attachment B) shall be erected at each Project site entrance prior to the commencement of construction.
- Use a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes to minimize visible fugitive dust emissions. If the Project site has exposed sand or fines deposits, or if the Project exposes such soils through earthmoving, chemical stabilization or covering with a stabilizing layer of gravel will be required to eliminate visible dust/sand from the sand/fines deposits.
- All perimeter fencing shall be wind fencing or the equivalent, to a minimum of 4 feet of height or the top of all perimeter fencing. The Project Applicant or successor in interest shall maintain the wind fencing as needed to keep it intact and remove windblown dropout. This wind fencing requirement may be superseded by local ordinance, rule, or Project-specific biological mitigation prohibiting wind fencing.
- All maintenance and access vehicular roads and parking areas shall be stabilized with chemical, gravel, or asphaltic pavement sufficient to eliminate visible fugitive dust from vehicular travel and wind erosion. The Project Applicant or successor in interest shall take actions to prevent Project-related trackout onto paved surfaces and clean any Project-related

trackout within 24 hours. All other earthen surfaces within the Project area shall be stabilized by natural or irrigated vegetation, compaction, chemical, or other means sufficient to prohibit visible dust from wind erosion.

- Obtain MDAQMD permits for any miscellaneous process equipment that may not be exempt under MDAQMD Rule 219 including, but not limited to, internal combustion engines with a manufacturer's maximum continuous rating greater than 50 brake horsepower.

Air Quality Mitigation Measures

Location: Section 4.2.5, Mitigation Measures and Level of Significance After Mitigation (pp. 4.2-42 through 4.2-44)

Explanation for Change and Discussion:

Since circulation of the Draft EIR, consideration was given to ways in which mitigation measures could be strengthened and/or improved. In particular, additional measures to reduce the Project's air pollutants were considered. These measures are aimed at reducing both construction and operational emissions. It should be noted that while the Draft EIR determined that the Project's construction emissions were below the applied thresholds of significance and mitigation is not required, the developer has requested that the suggested measures nonetheless be included within the Draft EIR as mitigation measures and tracked within the Mitigation Monitoring and Reporting Program. As such, MM-AQ-2 and MM-AQ-3 have been modified below. New mitigation measures are included as MM-AQ-4 through MM-AQ-7.

Changes:

Construction

MM-AQ-1 The Project shall utilize "Super-Compliant" low-volatile organic compound (VOC) paints which have been reformulated to exceed the regulatory VOC limits put forth by MDAQMD's Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. Alternatively, the Project Applicant shall utilize tilt-up concrete buildings that do not require the use of architectural coatings.

MM-AQ-2 The following measures shall be implemented to reduce off-road equipment exhaust and off-site mobile source emissions during construction:

- Require all generators, and all diesel-fueled off-road construction equipment greater than 75 horsepower, to be zero-emissions or equipped with California Air Resources Board (CARB) Tier 4 Final compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. An exemption from these requirements may be granted by the Town of Apple Valley in the event that the applicant documents that equipment with the required tier is not reasonably available and corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment (for example, another piece of equipment can be replaced with a zero-emission equipment to offset the emissions associated with using a piece of equipment that does not meet Tier 4 Final standards). Before an exemption may be considered by the Town, the applicant shall be required to demonstrate that at least two

construction fleet owners/operators in the San Bernadino Region were contacted and that those owners/operators confirmed Tier 4 Final or better equipment could not be located within the San Bernardino Region. To ensure that Tier 4 Final construction equipment or better would be used during the proposed Project's construction, the applicant shall include this requirement in applicable bid documents, purchase orders, and contracts. Successful contractors must demonstrate the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.

- Provide infrastructure for zero-emission off-road construction equipment if the contractors selected to construct the Project plan to use zero-emission off-road construction equipment.
- Provide electrical hook ups to the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills and compressors. In applicable bid documents and contracts with contractors selected to construct the Project, include language requiring all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers, etc.) used during Project construction to be electric.
- Require construction equipment to be turned off when not in use.
- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11.
- Prohibit off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day, as feasible.
- Designate an area in the construction site where electric-powered construction vehicles and equipment can charge, as feasible.
- Keep on site 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, as feasible.
- Conduct an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts, as feasible.
- Provide information on transit and ridesharing programs and services to construction employees, as feasible.
- *Provide meal options on site or shuttles between the facility and nearby meal destinations for construction employees, as feasible.*

Operation

MM-AQ-3 The Project shall implement the following measures in order to reduce operational off-road equipment, stationary source, and on-road vehicle air pollutant emissions to the extent feasible:

- All cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and landscaping equipment) shall be zero-emission vehicles. Each building shall include the necessary charging stations or other necessary infrastructure for cargo handling equipment. The building manager or their designee shall be responsible for enforcing these requirements.
- All diesel-fueled emergency generators shall be equipped with California Air Resources Board (CARB) Tier 4 Final compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by

including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors.

- Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the Town of Apple Valley demonstrating that occupants/tenants of the Project site have been provided documentation on funding opportunities, such as the Carl Moyer Program, that provide incentives for using cleaner-than-required engines and equipment.
- Prior to certificate of occupancy, install conduit and infrastructure for Level 2 (or faster) electric vehicle charging stations on-site for employees for the percentage of employee parking spaces commensurate with Title 24 requirements in effect at the time of building permit issuance plus additional charging stations equal to 5% of the total employee parking spaces in the building permit, whichever is greater. By 2030 install Level 2 (or faster) electric vehicle charging stations for 25% of the employee parking spaces required.
- Conduit shall be installed to tractor trailer parking areas in logical locations determined by the Project Applicant during construction document plan check, for the purpose of accommodating the future installation of electric truck charging stations at such time this technology becomes commercially available.
- In anticipation of a transition to zero emissions truck fleets during the lifetime of the Project, install at least four heavy-duty truck vehicle charging stations on-site by 2030.
- Require all heavy-duty vehicles engaged in drayage to or from the Project site to be zero emission beginning in 2030, as feasible.
- Require tenants to use zero-emission light- and medium-duty vehicles as part of business operations, as feasible.
- Provide meal options on site or shuttles between the facility and nearby meal destinations, as feasible.
- Post signs at every truck exit driveway providing directional information to the truck route.
- Improve and maintain vegetation and tree canopy for residents in and around the Project area in accordance with the approved landscaping plan.
- Include contractual language in tenant lease agreements requiring that any facility operator shall:
  - For occupants with more than 250 employees, require the establishment of a transportation demand management program to reduce employee commute vehicle emissions;
  - Place legible, durable, weather-proof signs at truck access gates, loading docks, and truck parking areas that identify applicable CARB anti-idling regulations. At a minimum, each sign shall include: (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and (3) telephone numbers of the building facilities manager and CARB to report violations. Prior to the issuance of an occupancy permit, the Town of Apple Valley shall conduct a site inspection to ensure that the signs are in place;
  - Ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at CARB-approved courses (such as the free, one-day Course #512);

- Be required to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. The building manager or their designee shall be responsible for enforcing these requirements;
- Be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program (PSIP), and the Statewide Truck and Bus Regulation;
- Train staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request;
- Enroll in the U.S. Environmental Protection Agency's SmartWay program, and if tenant owns, operates, or hires trucking carriers with more than 10 trucks to use carriers that are SmartWay carriers, as feasible.

MM-AQ-4 Cold storage operations shall be limited to a maximum of 15% of the total building square footage unless additional environmental review, including a Health Risk Assessment, is conducted and certified pursuant to the California Environmental Quality Act.

MM-AQ-5 Any operations requiring cold storage shall also require installation of electrical hook-ups for transport refrigeration units (TRUs) at all associated warehouse dock doors. Truck operators with TRUs shall be required to utilize electric plug-in units for refrigeration at loading docks and shall limit TRU idling to 30 minutes or less.

MM-AQ-6 Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the Town of Apple Valley demonstrating that the occupants of the Project site have been provided documentation that:

- Recommends the use of electric or alternatively fueled sweepers with high efficiency particulate air (HEPA) filters.
- Recommends the use of water-based or low-volatile organic compound (VOC) cleaning.
- For occupants with more than 250 employees, require the establishment of a transportation demand management program to reduce employee commute vehicle emissions.

MM-AQ-7 The Project shall be designed to:

- Be able to achieve Leadership in Energy and Environmental Design (LEED) certification and meet or exceed California Green Building Standards (CalGreen) Tier 2 standards in effect at the time of building permit application. Documentation shall be provided to the Town of Apple Valley demonstrating that the Project meets this requirement prior to the issuance of building permits.
- Include the application of surface treatments (such as PURETi Coat or PlusTi) on impervious ground surfaces that lessen impervious surface-related radiative forcing.
- Include high efficiency particulate air (HEPA) air filtration systems within in all warehouse facilities.

3 Response to Comments

This chapter of the Final Environmental Impact Report (EIR) for the Apple Valley 143 Project (Project) includes a summary of all comment letters that were submitted during the public review period for the Draft EIR, along with responses to comments in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15088. Copies of all comment letters that were submitted during the public review period for the Draft EIR are in Appendix A. The 45-day review period for the Draft EIR began on August 16, 2023, and ended on October 2, 2023.

The responses amplify or clarify information provided in the Draft EIR and/or refer the reader to the appropriate place in the document where the requested information can be found. Comments that are not directly related to environmental issues (e.g., opinions on the merits of the Project unrelated to its environmental impacts) are noted for the record. Where text changes in the Draft EIR are warranted based on comments received, updated Project information, or other information provided by Town staff, those changes are noted in the response to comment and the reader is directed to Chapter 2, Changes to the Draft EIR, of this Final EIR.

These changes to the analysis contained in the Draft EIR represent only minor clarifications/amplifications and do not constitute significant new information. In accordance with CEQA Guidelines Section 15088.5, recirculation of the Draft EIR is not required.

All written comments on the Draft EIR are listed in Table 3-1. All comment letters received on the Draft EIR have been coded with a number to facilitate identification and tracking. The comment letters were reviewed and divided into individual comments, with each comment containing a single theme, issue, or concern. Individual comments and the responses to them were assigned corresponding numbers (e.g., 1-1, 1-2, 1-3). To aid readers and commenters, electronically bracketed comment letters have been reproduced in this document and are included as Appendix A; the corresponding responses are provided below. The interested parties listed in Table 3-1 submitted letters during the public review period for the Draft EIR.

Table 3-1. Comments Received on the Draft EIR

Comment Letter	Commenter	Date
1	Mojave Desert Air Quality Management District	August 25, 2023
2	California Air Resources Board	September 29, 2023
3	Golden State Environmental Justice Alliance	October 2, 2023
4	Law Firm of Mitchell M. Tsai	October 2, 2023
5	Richard Bunck	October 2, 2023
6	Golden State Environmental Justice Alliance	October 27, 2023

The following responses were prepared to address the comments that were received during the public review period.

Response to Comment Letter 1

Mojave Desert Air Quality Management District
Chris Anderson, Planning and Air Monitoring Supervisor
August 25, 2023

1-1 This comment states that the Mojave Desert Air Quality Management District (MDAQMD) has reviewed the EIR and provides a brief summary of the Project. This comment serves as an introduction to comments that follow.

1-2 The comment summarizes that the analysis assumed that 15% of the proposed warehouse space would be cold storage.

1-3 The comment states that the MDAQMD has concerns that the Draft EIR air quality analysis underestimated the true potential proportion of the warehouse space utilizing cold storage and recommends that the Town of Apple Valley require 15% or less of the warehousing space be utilized as cold storage. As described in the Draft EIR, as it is currently unknown if any cold storage would be included at all, the 15% was assumed to provide a conservative assessment. However, the following mitigation measure has been added (refer to Chapter 2, Changes to the Draft EIR) (additions in underline, deletions in ~~strikeout~~):

MM-AQ-4 Cold storage operations shall be limited to a maximum of 15% of the total building square footage unless additional environmental review, including a Health Risk Assessment, is conducted and certified pursuant to the California Environmental Quality Act.

1-4 The comment states that the MDAQMD recommends the Town require measures to control dust during construction. Of note, compliance with MDAQMD Rules and Regulations, including Rule 403 for fugitive dust control, was included in the analysis and particulate matter emissions would not exceed the MDAQMD thresholds of significance, as depicted in Table 4.2-9 of the Draft EIR. As particulate matter emissions would not be potentially significant, mitigation is not required. However, to be responsive to the MDAQMD comment, Project Design Feature AQ-1 was added (refer to Chapter 2, Changes to the Draft EIR) as follows (additions in underline, deletions in ~~strikeout~~):

Project Design Features

The Project incorporates and expresses the following Project design feature (PDF) as a condition of approval.

PDF-AQ-1 Comply with all applicable Rules and Regulations of the MDAQMD including, but not limited to, Rules 401 (Visible Emissions), 402 (Nuisance), and 403 (Fugitive Dust). To ensure compliance with these Rules and Regulations, the Project Applicant or successor in interest shall prepare and submit a Dust Control Plan to the MDAQMD for approval. The Dust Control Plan shall document the best management practices (BMPs) that will be implemented during Project construction to prevent, to the

maximum extent practicable, wind and soil erosion. BMPs that will be included in the Dust Control Plan shall include, but are not limited to, the following:

- Signage compliant with Rule 403 (Attachment B) shall be erected at each Project site entrance prior to the commencement of construction.
- Use a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes to minimize visible fugitive dust emissions. If the Project site has exposed sand or fines deposits, or if the Project exposes such soils through earthmoving, chemical stabilization or covering with a stabilizing layer of gravel will be required to eliminate visible dust/sand from the sand/fines deposits.
- All perimeter fencing shall be wind fencing or the equivalent, to a minimum of 4 feet of height or the top of all perimeter fencing. The Project Applicant or successor in interest shall maintain the wind fencing as needed to keep it intact and remove windblown dropout. This wind fencing requirement may be superseded by local ordinance, rule, or Project-specific biological mitigation prohibiting wind fencing.
- All maintenance and access vehicular roads and parking areas shall be stabilized with chemical, gravel, or asphaltic pavement sufficient to eliminate visible fugitive dust from vehicular travel and wind erosion. The Project Applicant or successor in interest shall take actions to prevent Project-related trackout onto paved surfaces and clean any Project-related trackout within 24 hours. All other earthen surfaces within the Project area shall be stabilized by natural or irrigated vegetation, compaction, chemical, or other means sufficient to prohibit visible dust from wind erosion.
- Obtain MDAQMD permits for any miscellaneous process equipment that may not be exempt under MDAQMD Rule 219 including, but not limited to, internal combustion engines with a manufacturer's maximum continuous rating greater than 50 brake horsepower.

This PDF would not change the results or conclusions provided in the Draft EIR.

1-5 The comment serves as a conclusion and provides contact information for questions about the letter. This comment does not raise a specific concern related to the adequacy of the EIR; therefore, no further response is required.

Response to Comment Letter 2

California Air Resources Board
Richard Boyd, Assistant Division Chief, Transportation and Toxics Division
September 29, 2023

2-1 This comment is an introduction by the California Air Resources Board (CARB) indicating that they received the Draft EIR and provides a summary of the Project as described in the Draft EIR.

The Town acknowledges the comment as an introduction to comments that follow. No further response is required or necessary.

2-2 This comment expresses a concern that the Project will expose nearby communities to elevated levels of air pollution, greenhouse gas (GHG) emissions, and diesel particulate matter (DPM). These potential impacts were discussed in the Draft EIR, Sections 4.2 (Air Quality) and 4.6 (Greenhouse Gas Emissions). Long-term criteria air pollutant emissions (oxides of nitrogen [NO_x] and coarse particulate matter [PM_{10}]) and GHGs were determined to be significant and unavoidable, even after implementation of feasible mitigation. However, impacts associated with DPM exposure during construction and operations were determined to be less than significant after implementation of mitigation. The comment restates information contained in the Draft EIR and does not raise an environmental issue within the meaning of CEQA. The Town will include the comment as part of the Final EIR for review and consideration by the decision-makers prior to a final decision on the project. No further response is required or necessary.

2-3 The comment summarizes Executive Order (EO) N-79-20 and states that CARB staff urges the Town to plan for the use of zero-emission technologies within the Project area. This is an introductory comment. Specific CARB recommendations and responses are detailed in Response to Comments 2-9 through 2-11 below.

2-4 The comment states that the Draft EIR uses inappropriate trip lengths when modeling the Project's air quality impacts from mobile sources. Specifically, CARB suggests that the 40-mile trip distance used in the Draft EIR for trucks may have underestimated mobile source emissions since it doesn't account for truck trips to any Ports. However, the methodology and justification for this trip distance is detailed in the Draft EIR on pages 4.2-25 and 4.2-26. To identify an appropriate trip length assumption for heavy-duty truck trips, the EIR evaluated two different methods of estimation: (1) project-specific EMFAC-based estimate, and (2) South Coast Air Quality Management District (SCAQMD) recommendations. For Method 1, to determine an average operational truck trip distance, EMFAC data and the distance to the Port of Long Beach were examined. The Port of Long Beach was evaluated since it is the nearest major maritime cargo hub to the Project and potential origin/destination for haulage outside the Mojave Desert Air Basin (MDAB). However, as identified in Table 4.2-6, the weighted average trip distance for Method 1 was less than the SCAQMD recommendation, and therefore, the SCAQMD recommendation of 40 miles was used to be conservative. Therefore, the Town's CEQA experts disagree with the assertion that inappropriate trip lengths were used.

In addition, the commenter states that "since it is likely that the Project's truck traffic would transverse through the SCAQMD, the Project's mobile source air pollutant emissions should be compared to the SCAQMD's respective significance thresholds and reported in the FEIR". Assuming all mobile source

emissions are included in the Project's criteria air pollutant emissions inventory prior to comparing emissions to the MDAQMD thresholds represents a conservative assumption. This is so, because many of the heavy-duty trucks that CEQA forces the agency to assume are "caused" by the project are in fact already operating within the region due to existing goods movement patterns. Thus, in reality, speculative warehouse projects such as the project here, are not really causing the creation of new truck trips but instead are diverting them to different points of distribution origin. Nevertheless, this EIR conservatively assumes that all truck trips assigned to the project are in fact "new" trips when in fact this is likely not the case. It is acknowledged that due to the highly conservative assumed trip length for Project trucks that is set forth in this EIR, that portions of truck trips and associated mobile source emissions could possibly occur outside of the MDAQMD jurisdictional boundaries and within other air district boundaries. However, at this stage of the environmental analysis, there is no reliable forecast of truck trip origins and destinations for the Project and CARB does not provide any substantial evidence as to the proportion of trucks that travel in the SCAQMD jurisdiction, let alone all of the other air districts outside of the MDAQMD. Nonetheless, in an effort to show a good faith analysis and be responsive to the comment, an *Apple Valley 143 Supplemental Trip* Length *Assessment* memorandum was prepared (Urban Crossroads 2023) to estimate the proportion of potential traffic in the SCAQMD jurisdiction. As described in this memorandum, Streetlight Data's Truck Volume Metrics for medium-duty trucks (MDT) (2 and 3 axle trucks) and heavy-duty trucks (HDT) (4+ axle trucks) was compiled for the Project area and it was determined that approximately 39 percent of trucks cross over into the SCAQMD jurisdiction and, based on anticipated travel patterns, have an average trip length of about 21 miles (Urban Crossroads 2023). The Streetlight Data was incorporated into the California Emissions Estimator Model (CalEEMod) to estimate potential truck emissions within the SCAQMD jurisdiction, which are depicted in Table 1 below. Please also see Appendix B to the Final EIR for the *Apple Valley 143 Supplemental Truck Trip Length Assessment* memorandum and the CalEEMod output files.

Table 1. Estimated Maximum Daily Operation Mobile Source Criteria Air Pollutant Emissions in the SCAQMD Jurisdiction

Emissions Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Summer						
Mobile	1.14	51.69	16.24	0.28	11.12	3.40
Winter						
Mobile	1.09	54.10	16.42	0.28	11.12	3.40
Maximum Daily Emissions	**1.14**	**54.10**	**16.42**	**0.28**	**11.12**	**3.40**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Appendix B to the Final EIR
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

As depicted in Table 1, the Project's potential emissions associated with truck travel within the SCAQMD would not exceed the applicable thresholds of significance for any criteria air pollutants.

2-5 The comment states that the health risk assessment (HRA) used inappropriate assumptions when modeling the Project's health risk impacts from on-site transport refrigeration units (TRUs). Firstly,

CARB suggests that unless the Town restricts TRU idling durations to 30 minutes or less, the Project's HRA should be revised to assume a TRU idling duration supported by substantial evidence. Per this suggestion, the following mitigation measure has been added (Draft EIR page 4.2-44) (additions in underline, deletions in ~~strikeout~~):

MM-AQ-5 Any operations requiring cold storage shall also require installation of electrical hook-ups for transport refrigeration units (TRUs) at all associated warehouse dock doors. Truck operators with TRUs shall be required to utilize electric plug-in units for refrigeration at loading docks and shall limit TRU idling to 30 minutes or less.

The comment also states that the CARB has concerns about the assumed 15% proportion of the warehouse space utilizing cold storage and questions how the assumption of 358 trucks with TRUs was determined. The 358 trucks with TRUs was based on the total number of trucks (2-axle, 3-axle, and 4+-axle) that would be generated by the High-Cube Cold Storage Warehouse portion of the Project based on the associated trip rates (daily trips per 1,000 square feet), assuming that all trucks to the High-Cube Cold Storage Warehouse uses would include a TRU. As described in Response to Comment 1-3, MM-AQ-4 was added that limits cold storage operations to a maximum of 15% of the total building square footage unless additional environmental review is conducted. Since the Draft EIR based the number of trucks with TRUs based on square footage of the cold storage warehouse uses, the implementation of MM-AQ-4 would also restrict the number of trucks with TRUs accessing the Project site unless additional environmental review is conducted under CEQA, and additional restriction on the number of trucks in tenant lease agreements is not required.

2-6 The comment states that the Draft EIR does not analyze potential air pollutant emissions from the Project's TRUs. Contrary to this assertion, TRU emissions were modeled using CARB's OFFROAD2021 emission factors for Transportation Refrigeration Units and were included in Table 4.2-11 and Table 4.2-12 of the Draft EIR. As indicated in these tables, the TRU emissions would be a minimal contributor to the overall criteria air pollutant inventory.

2-7 This comment summarizes the operational criteria air pollutant impact determinations and mitigation measures applied to the Project, as presented in Section 4.2 (Air Quality) of the Draft EIR. The comment restates information contained in the Draft EIR and does not raise an environmental issue within the meaning of CEQA. The Town will include the comment as part of the Final EIR for review and consideration by the decision-makers prior to a final decision on the project. No further response is required or necessary.

2-8 The Town notes the comment provides factual background information pertaining to CARB regulations and does not raise an environmental issue within the meaning of CEQA. The Town will include the comment as part of the Final EIR for review and consideration by the decision-makers prior to a final decision on the Project. No further response is required because the comment does not raise an environmental issue.

2-9 The comment praises many aspects of the Project, including proposed mitigation measures that would require the use of electric onsite equipment, zero-emission passenger vehicles and trucks, and the infrastructure to support that equipment and follows with two suggestions: 1) a mitigation requiring installation of infrastructure to support electric TRUs, and 2) modifying MM-AQ-3 in the Draft EIR to accelerate electric infrastructure sooner than 2030 to support trucks complying with the Advanced

Clean Fleets regulation. The first suggestion was addressed previously in Response to Comment 2-5 and the second suggestion is an introductory sentence to Comment 2-10. Please see also Response to Comment 2-10 below.

2-10 This comment urges the Town to include a mitigation measure or project design feature requiring all trucks accessing the Project site to be zero emissions and states that based on CARB's review of the zero-emission trucks listed in the Hybrid and Zero-emission Truck and Bus Voucher Incentive Program, there are commercially available electric trucks that can meet the freight transportation needs of individual industrial uses under the proposed Project today. Although all-electric trucks may be physically available, albeit not in sufficient quantity, there are further economic and infrastructure related constraints that make including such mitigation measure proposed by CARB—requiring all trucks accessing the Project site to be zero emissions—wholly infeasible today, and likely well into the future, based on 1) insufficient electric grid capacity, 2) logistics barriers, 3) zero-emission trucks are cost prohibitive, and 4) sourcing material is scarce and causes environmental effects. These factors are discussed in detail below.

The first major issue that makes requiring all trucks accessing the Project site to be zero-emissions infeasible, is that there is not enough electrical grid power to sustainably charge these trucks. For example, one trucking company tried to electrify just 30 trucks at a terminal in Joliet, Illinois. Shortly after this plan began, local officials shut it down, commenting that it would draw more electricity than is needed to power the entire city.[1] In a May 2023 report by Resources for the Future, titled *Medium- and Heavy-Duty Vehicle Electrification: Challenges, Policy Solutions, and Open Research Questions*, the report states that Medium- and heavy-duty electric vehicles (MHDEV) charging (which may exceed several megawatts [MWs] of electricity demand for large fleets) could destabilize electricity distribution systems.[2] Therefore, significant investments into the grid, transmission system, and generation capacity are required.[3] If the Project requires every truck entering the facility to be zero-emissions, it will put a significant strain on California's power grid; one the grid cannot handle in the short-term, must less sustain in the long run.

Not only can local and state electrical infrastructure not sustain fully electric trucks, the logistical and operational barriers of using such trucks is also extremely prohibitive. To gain widespread use, MHDEVs must be comparable to diesel vehicles in model options, range, recharge time, payloads, and maintenance.[4] However, MHDEVs generally have ranges below 200 miles, versus more than 1,000 miles for diesel vehicles.[5] Additionally recharge times are substantially longer than diesel refueling. For example, a diesel truck can spend 15 minutes fueling anywhere in the country and then travel about 1,200 miles before fueling again.[6] In contrast, today's long-haul battery electric trucks have a range of about 150–330 miles and can take up to 10 hours to charge.[7] Moreover, fleets without a charging depot will need to rely on public charging stations. Unfortunately, significant investment must first be made before widespread public charging is feasible.[8] Lastly, weight of MHDEVs is also a significant issue that will lead to increased operational barriers. Battery-electric trucks, which run on two

1 https://www.trucking.org/news-insights/heavy-dose-reality-electric-truck-mandates
2 https://media.rff.org/documents/Report_23-03_v3.pdf.
3 *Id.*
4 *Id.*
5 *Id.*
6 https://www.trucking.org/news-insights/heavy-dose-reality-electric-truck-mandates
7 *Id.*
8 https://media.rff.org/documents/Report_23-03_v3.pdf.

approximately 8,000-pound lithium ion batteries, are far heavier than diesel trucks.[9] Because trucks are subject to strict federal and state weight limits, as seen by weighing stations throughout California and the United States, requiring zero-emission battery electric trucks will significantly decrease the payload of each truck, thus requiring more trucks to be in the road and increasing both traffic congestion and tailpipe emissions.[10]

In addition to the barriers described above, zero-emission trucks are currently cost prohibitive for most fleet owners. A new, clean-diesel long-haul tractor typically costs in the range of $180,000 to $200,000.[11] Meanwhile, a comparable battery-electric tractor—with a quarter of the range and thus requiring frequent and long hours of charging—costs upwards of $480,000.[12] This $300,000 upcharge is cost prohibitive for the overwhelming majority of truck carries as more than 95% of trucking companies are small businesses operating ten (10) trucks or fewer.[13] Enacting the mitigation CARB requests will push many truck carriers out of business, tighten capacity, and potentially cause severe price inflation for all goods.[14] Not only do the trucks themselves pose a financial burden, so does the installation of a charging station, which can exceed $100,000.[15] As stated previously, many small trucking businesses will thus be required to use public charging stations, in which the infrastructure for such charging is not widely available.[16]

Finally, if the above challenges were not enough, there is a significant constraint in sourcing enough raw minerals needed to produce the lithium-ion batteries uses in these zero-emission trucks. For example, tens of millions of tons of cobalt, graphite, lithium, and nickel will need to be produced.[17] It is estimated that it could take up to 35 years to acquire all the minerals needed to generate enough truck batteries for current levels of global production.[18] Additionally, expanding capacity and sourcing this amount of material creates massive environmental effects, that in some respects could exceed the emissions of current clean-diesel trucks.[19]

Although no one is certain, it is estimated that it will take several decades to reach a point where zero-emission trucks are fully feasible, and thus allow project applicants to require the mitigation CARB suggests. This is illustrated by CARB's own lofty goals, to require all trucks entering a California port to be zero-emission by 2035, and for 'last-mile' delivery trucks and vans to be zero-emission by 2040.[20] By setting these dates, which are 12 and 17 years in the future, CARB is acknowledging that current infrastructure and costs make requiring exclusively zero-emission trucks infeasible in the next decade. Significant investment in public charging, battery size, battery sourcing, battery range, and electric grid capacity must begin now, to meet the goals set by CARB.

9 https://www.trucking.org/news-insights/heavy-dose-reality-electric-truck-mandates
10 *Id.*
11 *Id.*
12 *Id.*
13 *Id.*
14 *Id.*
15 https://media.rff.org/documents/Report_23-03_v3.pdf
16 https://www.ccjdigital.com/alternative-power/battery-electric/article/15545697/charging-forward-with-electric-truck-charging-stations
17 https://www.trucking.org/news-insights/heavy-dose-reality-electric-truck-mandates
18 *Id.*
19 *Id.*
20 https://ww2.arb.ca.gov/news/california-takes-bold-step-reduce-truck-pollution

Based on the response above, all feasible mitigation has been incorporated into the Project. This comment is noted and forwarded to the decision-makers for their consideration; however, the EIR's analysis is adequate as provided and no further response is required.

2-11 The Town acknowledges the comment and notes it provides a concluding summary of CARB's concerns, which have been addressed above, and does not raise new or additional environmental issues concerning the adequacy of the Draft EIR. For that reason, the Town provides no further response to this comment.

2-12 This comment is a concluding statement. The Town of Apple Valley thanks CARB for its review of the EIR.

Response to Comment Letter 3

Golden State Environmental Justice Alliance
Gary Ho, Attorney, Blum, Collins & Ho LLP
October 2, 2023

3-1 The comment notes that the comment letter has been submitted by Blum Collins on behalf of the Golden State Environmental Justice Alliance. Additionally, the comment requested to be added to the public interest list for the Project. This comment serves as an introduction to comments that follow.

3-2 This comment summarizes the proposed Project and does not identify specific areas where the EIR is inadequate; therefore, no further response is required.

3-3 The comment refers to comments provided by SWAPE, which are included as an attachment to the comment letter. Refer to Responses to Comments 3-16 through 3-23 in which these comments are addressed.

3-4 This comment expresses a concern regarding the EIR's analysis of the Project's air quality impacts on the surrounding community. The comment states this is particularly important due to the Project site's location in an area that is burdened by pollution, as indicated by CalEnviroScreen. Neither the Town, the MDAQMD, nor the State CEQA Guidelines include thresholds that consider environmental justice such as the CalEnviroScreen results, but rather account for the potential health effects of a project with project-level thresholds. As such, there is currently no air quality guidance or thresholds to analyze areas with higher pollution burden differently from areas with lower pollution burden. While CalEnviroScreen is a useful tool in assessing a community's risk, it is not an appropriate tool for evaluating a project's impact on the environment as required under CEQA. An air quality emissions impact analysis and construction and operation health risk assessments were prepared for the Project and incorporated into the EIR (as described in Section 4.2 of the Draft EIR). As discussed in the Draft EIR, the Project would result in exceedances of a criteria air pollutant (NO_X and PM_{10}), even after implementation of feasible mitigation. However, as also discussed within the Draft EIR, the effects of this exceedance would occur on a regional scale, and CEQA does not currently treat this impact in a different manner depending on the socioeconomic characteristics of the community. Nonetheless, it is also important to note that the Project's incremental increase in potential cancer and non-cancer health risk impacts with regard to sensitive receptors in the vicinity of the Project and haul routes was determined to be less than significant with mitigation incorporated. Moreover, development of the Project at the Project site would provide quick and efficient access to Highway 395 and Interstate 15, thereby eliminating the need for truck traffic to take longer routes through residential or commercial/retail areas. This comment is noted and forwarded to the decision-makers for their consideration; however, the EIR's analysis is adequate as provided and no further response is required.

3-5 The comment states that California's Building Energy Code Compliance Software (CBECC) is the State of California's only approved compliance modeling software for non-residential building to show compliance with Title 24, and that CalEEMod is not listed as approved software. Of importance, the Project will be required to comply with Title 24 by law and the CalEEMod modeling is not intended to demonstrate compliance with Title 24, but rather, to provide a reasonable estimate of potential energy demand (including petroleum, which the CBECC software does not include) for public disclosure and informational purposes under CEQA.

The comment also states that the modeling does not comply with the 2022 Building Energy Efficiency Standards, and under-reports energy impacts, but the comment does not provide evidence of this statement. In fact, since CalEEMod 2020.4.0 was the current version available and incorporated energy efficiency standards per the 2019 Title 24 code, and the 2019 Title 24 standards were less stringent than current 2022 Title 24 standards, the estimated electricity and natural gas energy demand for the Project likely over-reported energy impacts and provided a conservative analysis.

Overall, the commenter has not provided any substantial evidence to demonstrate that the use of CalEEMod to estimate energy demand is either inappropriate or inaccurate. Therefore, no revisions are required, and no further response is necessary.

3-6 This comment expresses a concern that the EIR did not include a consistency analysis with the Town's Climate Action Plan and General Plan and lists several policies within the General Plan that are believed to be applicable to the Project. The Draft EIR did indeed include a consistency analysis with applicable General Plan policies within each impact analysis section of the EIR, and the Land Use and Planning chapter included a more focused analysis of the Town's General Plan policies under Section 4.9.4, Impact Analysis under Threshold B (pages 4.9-4 through 4.9-8). The EIR did not include a consistency analysis for each and every goal, policy, and implementation policy of the General Plan because many of the goals and policies in the General Plan are Town-level planning efforts that are not applicable to the Project and would not be the responsibility of the Project Applicant to implement. In addition, the thresholds used to determine the significance of a Project's land use impacts (per Appendix G of the CEQA Guidelines) ask whether a project would "Cause a significant environmental impact due to a conflict with any *applicable* land use plan, policy, or regulation adopted *for the purpose of avoiding or mitigating an environmental effect*" (emphasis added). Therefore, the Draft EIR included an analysis of the Project's consistency with each of the applicable General Plan goals and policies that have been adopted by the Town to avoid or mitigate environmental effects of new development projects. As such, the Draft EIR has evaluated the project's consistency with all applicable General Plan land use policies and no revisions are necessary. Because no new environmental issues were identified, no further analysis is necessary.

3-7 This comment expresses concern that the assessment of fees, with regards to impacts at the I-15 northbound Ramps at Outer I-15/Stoddard Wells Road, is not adequate as there is no evidence mitigation will actually result. Section 4.12 (Transportation) of the Draft EIR concludes that the project would have a significant and unavoidable impact at this intersection. As part of the cumulative traffic impact analysis, Section 4.12 (Transportation, Threshold E) determined that the project may increase a hazardous condition due to queuing impacts at the I-15 northbound Ramps/Outer I-15/Stoddard Wells Road intersection under the Opening Year (2025) plus Project traffic conditions and Horizon Year (2040) plus Project conditions. Improvement measures required to mitigate the Project's queuing impacts would include fair-share contributions to this intersection. Since the Town does not have jurisdiction over these facilities, these improvements cannot be assumed to be in place prior to Project's occupancy. Thus, the DEIR noted that the Project's impact to increase in hazardous conditions (i.e., queuing) would be significant and unavoidable. Therefore, the EIR is not implying that the payment of fees would mitigate the identified impact. This comment also states that the EIR must be revised and recirculated to include the LOS analysis as cumulatively considerable significant impact as the

project conflicts with Transportation Impact Threshold A and Land Use and Planning Impact Threshold B because it is not consistent with the following General Plan policy:

- 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

The TIS prepared for the Project was not prepared solely for the purposes of environmental review under CEQA (although portions of the TIS were used to assist in the environmental review of the Project). Rather, the TIS was prepared to evaluate congestion-based level of service effects as required by the Town's Development Title standards. Pursuant to Senate Bill 743 and CEQA Guidelines Section 15064.3, congestion-based level of service effects (i.e., those analyzed in the TIS) may no longer be used to evaluate a Project's transportation impact. As such, consistency with Circulation Element Program 1.A.4 (LOS policy) was not discussed within the Draft EIR because CEQA does not require LOS analysis.. Any reference to congestion-based level of service in the Draft EIR were to analyze traffic safety and potential hazards. Notwithstanding, the Town has noted these comments and forwarded them to the Town's decision-makers for consideration. However, because the Town has determined that the TIS meets the requirements of the Town's Development Title, and because the Project's transportation-related impacts (i.e., those that require analysis under CEQA) have been adequately evaluated in the Draft EIR, the Town has determined that no further transportation related analysis is necessary and the Draft EIR is adequate as provided.

3-8 This comment expresses concern that the Draft EIR does not provide analysis of the buildout conditions of the Town's General Plan and that the development of the proposed Project would account for approximately 20.2% of the planned development within the Regional Commercial land use designation. As noted in Section 3.2, Environmental Setting of the Draft EIR, a cumulative project list was developed through regional research and consultation with the Town staff during the traffic scoping process for the Project. Draft EIR analyzed cumulative impacts for all resource areas, including land use and planning. As noted in Section 4.9.4, Impacts Analysis, under Threshold C, *Would the Project result in cumulatively considerable impacts with regard to land use*, the proposed Project would be consistent with the goals and policies of the Apple Valley General Plan and the Zoning Ordinance and would therefore not contribute to a cumulatively considerable impact regarding land use. The proposed project would account for approximately 20.2% of the planned development within the Regional Commercial land use designation, it would not exceed the build-out already analyzed in the General Plan. The Draft EIR found that the Project's cumulative impacts to Land Use and Planning would be less than significant, and no mitigation is required. In addition, any future development would be required to undergo environmental review and demonstrate consistency with all applicable planning documents governing the Project site, including the Apple Valley General Plan, Zoning Ordinance, and any applicable Specific Plans. As such, no new environmental issues were identified, no further analysis is necessary.

3-9 This comment states that the EIR omits that the Warehouse Overlay within the Regional Commercial District was not adopted by the Town until January 11, 2022, and that the EIR did not consider plans that were adopted prior to this date. The Initial Study/Notice of Preparation (IS/NOP) for this Project was circulated for public review from July 1, 2022 through August 1, 2022, approximately seven months after the adoption of the Warehouse Overlay. CEQA Guidelines Section 15125 specifies that a project's baseline conditions should be evaluated as they exist at the time of the NOP. Since the Warehouse Overly was already adopted at the time the Project's NOP was circulated for public review,

the Draft EIR adequately considered the Town's Plans. Additionally, the *Warehouse Distribution Overlay within the Regional Commercial District IS/MND* determined that no impacts would occur to Land Use and Planning, and concluded that "any future development [within this area] will not present any potential land use conflicts". Therefore, the Project's evaluation of the Warehouse Overlay was adequately evaluated in the Draft EIR, the Town has determined that no further analysis is necessary and the Draft EIR is adequate as provided.

3-10 This comment expresses a concern that the Project is inconsistent with SCAG 2020-2045 RTP/SCS due to errors in the modeling. Please refer to Responses to Comments 3-4 through 3-10. Consistency with the SCAG 2020-2045 RTP/SCS was included within Table 4.9-1 of the Land Use and Planning section of the Draft EIR. The analysis provided within Table 4.9-1 remains accurate. The comment also expresses a concern regarding the EIR's air quality, GHG, and transportation analysis. Please refer to Responses to Comments 3-11 through 3-23 in which these concerns are addressed.

3-11 This comment repeats the concerns noted in Comment 3-7 regarding the assessment of fees related to impacts at the I-15 northbound ramps at Outer I-15/Stoddard Wells Road, and the LOS consistency analysis. As noted above, Section 4.12 (Transportation) of the Draft EIR concludes that the project would have a significant and unavoidable impact at this intersection. As part of the cumulative traffic impact analysis, Section 4.12 (Transportation, Threshold E) determined that the project may increase a hazardous condition due to queuing impacts at the I-15 northbound Ramps/Outer I-15/Stoddard Wells Road intersection under the Opening Year (2025) plus Project traffic conditions and Horizon Year (2040) plus Project conditions. Improvement measures required to mitigate the Project's queuing impacts would include fair-share contributions to this intersection. Since the Town does not have jurisdiction over these facilities, these improvements cannot be assumed to be in place prior to Project's occupancy. Thus, the DEIR noted that the Project's impact to increase in hazardous conditions (i.e., queuing) would be significant and unavoidable. Therefore, the EIR is not implying that the payment of fees would mitigate the identified impact. Therefore, the EIR is not implying that the payment of fees would mitigate the identified impact. The TIS prepared for the Project was not prepared solely for the purposes of environmental review under CEQA (although portions of the TIS were used to assist in the environmental review of the Project). Rather, the TIS was prepared to evaluate congestion-based level of service effects as required by the Town's Development Title standards. Pursuant to Senate Bill 743 and CEQA Guidelines Section 15064.3, congestion-based level of service effects (i.e., those analyzed in the TIS) may no longer be used to evaluate a Project's transportation impact. As such, consistency with Circulation Element Program 1.A.4 (LOS policy) was not discussed within the Draft EIR because CEQA does not require LOS analysis.. Any references to congestion-based level of service in the Draft EIR were to analyze traffic safety and potential hazards. Notwithstanding, the Town has noted these comments and forwarded them to the Town's decision-makers for consideration. However, because the Town has determined that the TIS meets the requirements of the Town's Development Title, and because the Project's transportation-related impacts (i.e., those that require analysis under CEQA) have been adequately evaluated in the Draft EIR, the Town has determined that no further transportation related analysis is necessary and the Draft EIR is adequate as provided.

This comment also states that the Draft EIR underreported the quantity VMT generated by the Project and that the project's actual VMT generated is not consistent with the significance threshold and legislative intent of SB 743 to reduce greenhouse gas emissions by reducing VMT. The VMT analysis as presented in Section 4.12 (Transportation) of the Draft EIR did not include the project-generated

truck VMT when identifying the project's potential impacts to VMT, consistent with guidance from the Governor's Office of Planning and Research (OPR) and the Town of Apple Valley VMT Significance Thresholds. SB-743, which was codified in Public Resources Code section 21099, was signed by the Governor in 2013 and directed the Governor's Office of Planning and Research (OPR) to identify alternative metrics for evaluating transportation impacts under CEQA. Per Section 21099 of the Public Resource Code, the selection of the VMT criteria for determining the significance of transportation impacts was intended to promote reductions of greenhouse gas emissions (GHG); to develop multimodal transportation networks; and to diversify land uses. The changes to the CEQA Guidelines in response to Section 21099 include a new section (15064.3) that specifies that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts. In addition, Section 15064.3, subdivision (a), states, "For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." In addition, various legislative mandates and state policies have established quantitative GHG emission reduction targets. Pursuant to Senate Bill 375, the California Air Resources Board GHG emissions reduction targets for metropolitan planning organizations (MPOs) call for reductions in GHG emissions only from cars and light trucks. Consequently, the VMT criteria and thresholds in the CEQA Guidelines related to employment generating uses (such as the project) do not apply to those components of proposed projects that involve commercial vehicles. However, the VMT criteria and thresholds would apply to those components that involve passenger vehicles.

A separate Technical Advisory (TA) issued by OPR[21] provides additional technical details on calculating VMT and assessing transportation impacts for various types of projects. The OPR Technical Advisory states that "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. It does not include heavy-duty trucks, semi-trailers, construction equipment, or other commercial-type vehicles. While the OPR TA allows for heavy duty truck VMT to be included in modeling, it is important to note that this allowance was provided for modeling convenience and ease of calculation. The TA also states that the analysis should be based on an apples-to-apples comparison, wherein the same VMT (e.g., with trucks or without trucks) should be reported for both the threshold and the project. This was also clarified and noted during an informational question and answer session conducted by OPR to provide information and guidance on conducting project-level VMT analysis, that it is automobile VMT (i.e. cars and light duty trucks) that should to be quantified.

The following example from the County of Santa Barbara Environmental Thresholds Update summarizes the issue concisely: *For example, a proposed oil production or agricultural processing facility may involve significant numbers of commercial trucks and semitrailers that would haul supplies and products to and from the facility. The project may also involve employees and others who would travel to and from the facility in passenger vehicles. In this case, the VMT analysis would not address potential VMT generated by the commercial trucks and semi-trailers and, therefore, would not consider such VMT a significant transportation impact. Rather, the VMT analysis would focus on VMT generated by passenger vehicles traveling to and from the facility*[22].

21 OPR (California Governor's Office of Planning and Research). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018. Accessed February 2021. http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

22 Santa Barbara County Environmental Thresholds and Guidelines Manual, http://www.countyofsb.org/uploadedFiles/plndev/Content/Projects/FINAL%20Ch.%2018%20Environmental%20Thresholds%20Update.pdf

The VMT metric used for measuring the Project's transportation impact is VMT per Service Population, an efficiency metric which does not include trucks or trucks equivalents. As such, trucks were not included for measuring against SB 743 VMT which is the threshold adopted by the Town of Apple Valley. In addition, to evaluate the Project's effect on VMT for the region, link based total VMT per service population was also calculated for both San Bernardino County and Unincorporated San Bernardino County without and with the project.

In keeping with the intent of Section 21099 of the Public Resource Code and Section 15064.3, subdivision (a) of the CEQA Guidelines (which specify that automobile VMT is the primary metric that should be evaluated), the extra step of removing heavy truck VMT from the San Bernardino Transportation Analysis Model (SBTAM) was undertaken to identify applicable thresholds as well as to provide for a project level analysis that most appropriately meets the intent of SB 743. The numbers reported in Section 4.12 (Transportation) of the Draft EIR are based on automobile (i.e. cars and light trucks) VMT for both the applicable threshold and the project VMT, allowing for an apples-to apples comparisons of VMT generated by vehicle types across project assessment, significance thresholds, and mitigation (if any).

This comment states that the EIR 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 comments notes that there are no exhibits adequately depicting the onsite turning radius available for trucks maneuvering throughout the site. The Project's potential to substantially increase hazards due to a geometric design feature was analyzed in the Draft in within Chapter 4.12, Transportation under Threshold C and determined there were no hazardous design features that would occur as part of the Project's roadway improvements or site access. Appendix C, of the Final EIR, On-Site Truck Turning Template, shows truck inbound and outbound paths within the internal drive aisles and other areas within the Project site accessed by trucks that supports the analysis and conclusions within the Draft EIR. As shown, the internal drive aisles are anticipated to accommodate the wide turning radius of trucks as currently designed. The passenger vehicles spaces are not located within the truck/trailer path of travel.

3-12 This comment raises issue with the conclusions in the Draft EIR related to population and housing. With regard to the concern regarding the labor force that would be needed to construct the Project, the number of construction workers needed during any given period would largely depend on the specific stage of construction but would likely fluctuate between a few and several dozen workers on a daily basis. Based on information provided by the Project Applicant, they intend to construct the Project using a licensed general contractor with full-time staff that are assigned to construction projects on a rotating basis, depending on the nature of the construction phase and the required worker skillsets. As such, the Project's construction labor needs would be met by a pool of existing construction workers in the region.

Additionally, as states within the Purpose and Need in Chapter 3, Project Description, of the Draft EIR, the High Desert/Victor Valley region has long been identified as an area having a low jobs–housing ratio (i.e., an area that has more potential workers living in a community than there are jobs for them),[23]

[23] A jobs–housing ratio is a commonly used economic metric used to determine whether or not a community or region provides a sufficient number of jobs for its residents. The metric is calculated by finding the relationship between where people work ("jobs") and where they live ("housing"). As of 2021, the Town had a jobs/housing ratio of 1.07, which is below regional targets ranging from 1.25–1.50 (SCAG 2021; APA 2003).

resulting in high numbers of residents commuting out of the region for work. Recognizing these trends, community leaders and officials have long sought to stimulate economic development within the High Desert region and provide residents with local employment opportunities. One strategy that community leaders and planners have used is to attract development of warehousing and distribution centers, which can provide hundreds of jobs per million square feet of development. As such, the Project would help meet the needs of the growing logistics sector while producing new jobs in a region that is typically viewed as housing rich and jobs poor.

As discussed in Section 5.7, Population and Housing, the Project is estimated to require approximately 2,108 employees at full buildout. The Town's population in 2010 was approximately 69,136 residents. According to the Town's General Plan, upon build-out, the Town could support a population of 185,858 residents. As such, the Project-related increase of approximately 2,108 employees would represent a nominal percentage of the Town's projected future population upon General Plan build-out. This represents a conservative approach, as this finding assumes that all future employees will have relocated to the Town as a result of the Project from outside of the Town, and that no future employees are already residents of the Town.

With regard to the comment on the adoption of the Warehouse Overlay, see response 3-9 above.

In summary, because the Draft EIR's employment generation estimates are based on substantial evidence, the Draft EIR analysis with regard to population and housing is adequate as provided.

3-13 This comment states that the EIR has not provided an adequate or accurate cumulative analysis related to grown inducing impacts and that the Warehouse Overlay within the Regional Commercial District did not plan for this growth until this Overlay was adopted. The Draft EIR addressed findings of significance with regard to land use in Section 4.9, Land Use of the Draft EIR and determined implementation of the Project would result in less-than significant cumulative impacts with regard to land use and planning. Growth-inducing impacts were discussed in Chapter 6, other CEQA Considerations under Section 6.1 and determined the Project is not considered to be significantly growth inducing. In addition, cumulative impacts were discussed for each resource topic and a comprehensive list of cumulative projects was compiled. The Draft EIR made the appropriate findings regarding the Project's significant and unavoidable impact determinations and feasible mitigation measures were applied where available. With regard to the Warehouse Overlay, see Response 3-12, above.

3-14 This comment expresses a concern regarding the Draft EIR's alternatives analysis. CEQA does not require that the Town evaluate a certain number of alternatives, so long as the alternatives eliminate or reduce significant effects of the project, attain the project's basic objectives, and are potentially feasible. (Pub. Resources Code, §21002; State CEQA Guidelines, §15126.6(a)-(b).) The Draft EIR included a comprehensive alternatives analysis that included alternative land uses and alternative sites. For alternative uses, given that the Project site is zoned for Regional Commercial (C-R) with Warehouse Distribution Regional Commercial (C-R) Overlay, uses that are either permitted by right or conditionally permitted were considered. Many of these uses would result in higher trip generation rates than the project, including but not limited to general office, building material and rental, automobile parts and service center, and car wash. Notably, residential uses were considered but rejected due to incompatibility issues with the existing industrial, transportation-related, and commercial land uses within the area. In addition, an alternative that would reduce all of the Project's significant and unavoidable impacts was considered; however, this would equate to a project 15%

the size of the proposed Project, which would clearly not be feasible. The Draft EIR's alternatives analysis thus met CEQA's requirement to evaluate a reasonable range of alternatives and is therefore adequate as provided.

3-15 The comment serves as a conclusion to the letter, and requests that the Town add the commenter to the Town's public interest list for the Project. The comment is noted and the Town has added the commenter to its list of parties to be notified for the Project. The comment does not identify specific areas where the EIR is inadequate; therefore, no further response is required.

3-16 The comment serves as an introduction to the attached SWAPE letter, introduces the Project, and summarizes the conclusion of the letter. The comment does not raise any specific issues concerning the adequacy of the EIR.

3-17 Comments were received regarding the modeling inputs in the California Emissions Estimator Model (CalEEMod) that questioned changes to model default parameters. However, as specifically identified in the CalEEMod User's Tips documentation, "Users are encouraged to understand the defaults and provide site specific data (e.g., construction schedule, construction equipment type, results of traffic study, predicted water usage, etc.), if available, for a more accurate analysis" (CAPCOA 2021). As such, the changes to the default CalEEMod assumptions for the project emissions modeling were appropriate based on applicant input and project-specific information. CalEEMod provides default values for input parameters such as for warehouse building square footage. After the minimum project characteristic and land use information is inputted, CalEEMod provides default values so that the model may still be used to evaluate emissions from a land use development project in the event that such detailed information is not yet known (for instance, for a project in the planning stage). Similarly, CalEEMod provides a host of default values for the construction emissions analysis. Construction default values were utilized where proposed project information was not readily available. Default inputs that were updated according to information provided by the Project Applicant include construction schedule phase dates for major activities (e.g., demolition, grading, building construction, paving, and architectural coating), construction truck and vehicle worker trips, and grading/excavation quantities.

Furthermore, the Project Applicant and their contractor(s) represent 'experts' in estimating construction activities for the project based on their experience with similar projects and their need to estimate construction activities, such as duration of construction and equipment needed, for budgeting. Substantial evidence is defined in the CEQA statute to mean "facts, reasonable assumptions predicated on facts, and expert opinion supported by facts" (14 CCR 15384(b)). Because assumptions provided the Project Applicant and their team represent an expert opinion supported by facts, these assumptions constitute substantial evidence under CEQA that can be used to more accurately estimate project-generated emissions.

Therefore, the use of project-specific data in CalEEMod is appropriate and fully in line with the CalEEMod User's Guide and the EIR's analysis is based on substantial evidence and is adequate as presented.

3-18 The comment reiterates previous concerns about changing default parameters in CalEEMod, specifically regarding architectural coatings. In the Unmitigated scenario, default VOC content of architectural coatings was adjusted based on compliance with MDAQMD Rule 1113, and the Mitigated scenario accounted for compliance with MM-AQ-1, which is a formal mitigation measure, which requires

Super-Compliant low VOC paints. As discussed in Response to Comment 3-17, the EIR's analysis and modification of CalEEMod default values is appropriate and substantiated.

3-19 The commenter states agreement with the Draft EIR in that the Project would result in a significant GHG impact but argues that the Draft EIR's conclusion of significant and unavoidable is incorrect. The comment then states that the EIR should include additional mitigation measures to reduce the Project's GHG emissions. This serves as an introduction to comments that follow.

3-20 The commenter suggests that additional feasible mitigation measures are available to reduce the Project's GHG impact. The measures provided are taken from the State of California Department of Justice's *Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act*.

It should be noted that the following measures listed in the State of California Department of Justice's Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act have already been incorporated in the Draft EIR as part of Mitigation Measures MM-AQ-1, MM-AQ-2, and MM-AQ-3 (see pages 4.2-42 through 4.2-44 of the Draft EIR):

- Requiring off-road construction equipment to be hybrid electric-diesel or zero emission, where available, and all diesel-fueled off-road construction equipment to be equipped with CARB Tier IV-compliant engines or better, and including this requirement in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.
- 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.
- Using paints, architectural coatings, and industrial maintenance coatings that have volatile organic compound levels of less than 10 g/L.
- Requiring all on-site motorized operational equipment, such as forklifts and yard trucks, to be zero-emission with the necessary charging or fueling stations provided.
- Forbidding trucks from idling for more than three minutes and requiring operators to turn off engines when not in use.
- 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.
- Running conduit to designated locations for future electric truck charging stations.
- 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.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.

- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternative modes of transportation, including carpooling, public transit, and biking.
- Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

In addition, as detailed in Section 3.4.1, Project Components, of the Draft EIR, the Applicant would incorporate a number of Applicant Proposed Measures (APMs) that would help reduce the Project's environmental impact with regard to air quality, greenhouse gas emissions, and energy. These APMs incorporate the feasible portions of the State of California Department of Justice's Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act, listed below:

- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity that is equal to or greater than the building's projected energy needs, including all electrical chargers.
- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.
  - On days when the hourly average wind speed for the Town of Apple Valley exceeds 20 miles per hour, additional dust control measures shall be implemented, such as increased surface watering. Grading and excavation shall be prohibited when sustained wind speed exceeds 30 miles per hour.
- Designing all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible.

Additional State recommended measures have been added in Chapter 2, Changes to the Draft EIR, within MM-AQ-6 and MM-AQ-7. These measures are provided below:

- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.
- Designing to LEED green building certification standards.

With regard to feasibility of the other State recommended measures, please see Response 2-10, above. The comment does not address any inadequacies of the EIR and not further response is required.

3-21 This comment states the Project should not be approved without incorporating on-site renewable energy production such as solar based on the States targets for renewable energy production for 2045. Notably, on-site renewable energy production is already part of the Project. As described in Section 4.5

(Energy) of the Draft EIR, as part of the Project's design process, the Project applicant considered how the Project could potentially increase its reliance on renewable energy sources to meet the Project's energy demand. Based on this evaluation, the Project includes substantial solar generation per MM-GHG-1, which requires on-site solar generation sufficient to meet at least 75% of the Project's total operational energy requirements from within the building envelope (page 4.6-40 of the Draft EIR).

3-22 The comment provides a disclaimer regarding limited knowledge of the Project and the limits of SWAPE's analysis. The comment does not address any inadequacies of the EIR and not further response is required.

3-23 This comment includes the commenter's qualifications and experience. The comment does not raise any specific issues concerning the adequacy of the EIR, and no further response is required.

Response to Comment Letter 4

Law Firm of Mitchell M. Tsai
On behalf of the Southwest Mountain States Regional Council of Carpenters
October 2, 2023

4-1 This comment provided an introductory statement and expresses support for this project on behalf of the Southwest Mountain States Regional Council of Carpenters. The comment goes on to detail the Project's benefits to the environment and local economy through the incorporation of adequate mitigation. The Town will include the comment as part of the Final EIR for review and consideration by the decision-makers prior to a final decision on the project. No further response is required or necessary.

Response to Comment Letter 5

Richard Bunck
October 2, 2023

5-1 This comment states that the Draft EIR covers all of the bases on a micro-scale, but misses impacts related to the high desert as a whole (outside of Apple Valley), specifically the 15 freeway and the current gridlocked conditions. This comment goes on to state that good planning is necessary and that infrastructure should be in place before projects are approved.

Pursuant to Senate Bill 743 and CEQA Guidelines Section 15064.3, congestion-based level of service effects (i.e., potential gridlock on I-15 as noted by the commentor) may no longer be used to evaluate a Project's transportation impact. Any references to congestion-based level of service in the Draft EIR were to analyze traffic safety and potential hazards (queuing impacts), for both project-specific and future Horizon Year conditions, which accounts for future growth in the region. As discussed in Section 4.12, Transportation, the Project would result in additional traffic that would exacerbate queuing conditions under the Horizon Year (2040) Plus Project Conditions (queueing issues would continue to occur without Project-generated traffic regardless of the Project). Improvement measures have been identified for which the Project would be required to either construct or contribute fair-share costs to address these conditions. However, the intersection of I-15 Northbound Ramps and Outer I-15/Stoddard Wells Road are not within the Town's jurisdiction, but rather within the jurisdiction of the California Department of Transportation. Since the Town does not have jurisdiction over these facilities, these improvements cannot be assumed to be in place prior to Project's occupancy. Because this intersection is not within the jurisdiction of the Town, the Town will include the comment as part of the Final EIR for review and consideration by the decision-makers prior to a final decision on the Project. Furthermore, because the Project's transportation-related impacts (i.e., those that require analysis under CEQA) have been adequately evaluated in the Draft EIR, the Town has determined that no further transportation related analysis is necessary and the Draft EIR is adequate as provided. No further response is required or necessary.

Response to Comment Letter 6

Golden State Environmental Justice Alliance
October 27, 2023

6-1 This comment letter introduces the Golden State Environmental Justice Alliance (GSEJA) and references its comment letter submitted on the Draft EIR, dated October 2, 2023 (Comment Letter 3). The comment states that after further review, GSEJA is withdrawing its original comment letter in response to actions taken by the Project Applicant to address GSEJA's environmental concerns with the Project. The environmental concerns raised by GSEJA are included in Comment Letter 3. While GSEJA's original letter was rescinded, responses to these concerns, as well as additional actions that will be undertaken by the Project Applicant to address these concerns (i.e., additional mitigation measures that have been added to the Final EIR), are provided in Response to Comment Letter 3.

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4 Mitigation Monitoring and Reporting Program

4.1 Introduction

California Public Resources Code Section 21081.6 requires that, upon certification of an EIR, "the public agency shall adopt a reporting or monitoring program for the changes made to the Project or conditions of Project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during Project implementation." (PRC Section 21000–21177)

This Mitigation Monitoring and Reporting Program was developed in compliance with Section 21081.6 of the California Public Resources Code and Section 15097 of the CEQA Guidelines (14 CCR 15000–15387 and Appendices A–L.), and includes the following information:

- A list of mitigation measures
- The timing for implementation of the mitigation measures
- The party responsible for implementing or monitoring the mitigation measures
- The date of completion of monitoring

The Town of Apple Valley must adopt this Mitigation Monitoring and Reporting Program, or an equally effective program, if it approves the proposed Project with the mitigation measures that were adopted or made conditions of Project approval.

4.2 Mitigation Monitoring and Reporting Program Table

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
Air Quality				
MM-AQ-1. The Project shall utilize "Super-Compliant" low-volatile organic compound (VOC) paints which have been reformulated to exceed the regulatory VOC limits put forth by MDAQMD's Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. Alternatively, the Project Applicant shall utilize tilt-up concrete buildings that do not require the use of architectural coatings.	Prior to construction	Town of Apple Valley		
MM-AQ-2. The following measures shall be implemented to reduce off-road equipment exhaust and off-site mobile source emissions during construction: ▪ Require all generators, and all diesel-fueled off-road construction equipment greater than 75 horsepower, to be zero-emissions or equipped with California Air Resources Board (CARB) Tier 4 Final compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. An exemption from these requirements may be granted by the Town of Apple Valley in the event that the applicant documents that equipment with the required tier is not reasonably available and corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment (for example, another piece of equipment can be replaced with a zero-emission equipment to offset the emissions associated with using a piece of equipment that does not meet Tier 4 Final standards). Before an exemption may be considered by the Town, the applicant shall be required to demonstrate that at least two construction fleet owners/operators in the San Bernadino Region were contacted and that those	During construction	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
owners/operators confirmed Tier 4 Final or better equipment could not be located within the San Bernardino Region. To ensure that Tier 4 Final construction equipment or better would be used during the proposed Project's construction, the applicant shall include this requirement in applicable bid documents, purchase orders, and contracts. Successful contractors must demonstrate the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities. ▪ Provide infrastructure for zero-emission off-road construction equipment if the contractors selected to construct the Project plan to use zero-emission off-road construction equipment. ▪ Provide electrical hook ups to the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills and compressors. In applicable bid documents and contracts with contractors selected to construct the Project, include language requiring all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers, etc.) used during Project construction to be electric. ▪ Require construction equipment to be turned off when not in use. ▪ Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11. ▪ Prohibit off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day, as feasible. ▪ Designate an area in the construction site where electric-powered construction vehicles and equipment can charge, as feasible. ▪ Keep on site 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, as feasible. ▪ Conduct an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts, as feasible.				

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
▪ Provide information on transit and ridesharing programs and services to construction employees, as feasible. ▪ Provide meal options on site or shuttles between the facility and nearby meal destinations for construction employees, as feasible.				
MM-AQ-3. The Project shall implement the following measures in order to reduce operational off-road equipment, stationary source, and on-road vehicle air pollutant emissions to the extent feasible: ▪ All cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and landscaping equipment) shall be zero-emission vehicles. Each building shall include the necessary charging stations or other necessary infrastructure for cargo handling equipment. The building manager or their designee shall be responsible for enforcing these requirements. ▪ All diesel-fueled emergency generators shall be equipped with California Air Resources Board (CARB) Tier 4 Final compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. ▪ Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the Town of Apple Valley demonstrating that occupants/tenants of the Project site have been provided documentation on funding opportunities, such as the Carl Moyer Program, that provide incentives for using cleaner-than-required engines and equipment. ▪ Prior to certificate of occupancy, install conduit and infrastructure for Level 2 (or faster) electric vehicle charging stations on-site for employees for the percentage of employee parking spaces commensurate with Title 24 requirements in effect at the time of building permit issuance plus additional charging stations equal to 5% of the total employee parking spaces in the building permit, whichever is greater. By 2030 install Level 2 (or faster) electric vehicle charging stations for 25% of the employee parking spaces required.	**Use of Cargo Handling Equipment** During Project operation **Use of Diesel-Fueled Emergency Generators** During Project operation **Funding Opportunities** Prior to tenant occupancy **Installation of Conduit and Infrastructure for Level 2 Electric Vehicle Charging Stations** Prior to certificate of occupancy **Zero-Emissions Truck Charging Stations** During construction **Tenant Lease Agreements** Prior to tenant occupancy	**Use of Cargo Handling Equipment** Building Manager **Other** Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
▪ Conduit shall be installed to tractor trailer parking areas in logical locations determined by the Project Applicant during construction document plan check, for the purpose of accommodating the future installation of electric truck charging stations at such time this technology becomes commercially available. ▪ In anticipation of a transition to zero emissions truck fleets during the lifetime of the Project, install at least four heavy-duty truck vehicle charging stations on-site by 2030. ▪ Require all heavy-duty vehicles engaged in drayage to or from the Project site to be zero emission beginning in 2030, as feasible. ▪ Require tenants to use zero-emission light- and medium-duty vehicles as part of business operations, as feasible. ▪ Provide meal options on site or shuttles between the facility and nearby meal destinations, as feasible. ▪ Post signs at every truck exit driveway providing directional information to the truck route. ▪ Improve and maintain vegetation and tree canopy for residents in and around the Project area in accordance with the approved landscaping plan. ▪ Include contractual language in tenant lease agreements requiring that any facility operator shall: - For occupants with more than 250 employees, require the establishment of a transportation demand management program to reduce employee commute vehicle emissions; - Place legible, durable, weather-proof signs at truck access gates, loading docks, and truck parking areas that identify applicable CARB anti-idling regulations. At a minimum, each sign shall include: (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to “neutral” or “park,” and the parking brake is engaged; and (3) telephone numbers of the building facilities manager and CARB to report				

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
violations. Prior to the issuance of an occupancy permit, the Town of Apple Valley shall conduct a site inspection to ensure that the signs are in place; - Ensure that site enforcement staff in charge of keeping the daily log and monitoring for excess idling will be trained/certified in diesel health effects and technologies, for example, by requiring attendance at CARB-approved courses (such as the free, one-day Course #512); - Be required to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. The building manager or their designee shall be responsible for enforcing these requirements; - Be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program (PSIP), and the Statewide Truck and Bus Regulation. - Train staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request; - Enroll in the U.S. Environmental Protection Agency's SmartWay program, and if tenant owns, operates, or hires trucking carriers with more than 10 trucks to use carriers that are SmartWay carriers, as feasible.				
MM-AQ-4. Cold storage operations shall be limited to a maximum of 15% of the total building square footage unless additional environmental review, including a Health Risk Assessment, is conducted and certified pursuant to the California Environmental Quality Act.	During operation, this provision shall be in all tenant lease agreements.	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
MM-AQ-5. Any operations requiring cold storage shall also require installation of electrical hook-ups for transport refrigeration units (TRUs) at all associated warehouse dock doors. Truck operators with TRUs shall be required to utilize electric plug-in units for refrigeration at loading docks and shall limit TRU idling to 30 minutes or less.	During operation	Town of Apple Valley		
MM-AQ-6. Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the Town of Apple Valley demonstrating that the occupants of the Project site have been provided documentation that: ▪ Recommends the use of electric or alternatively fueled sweepers with high efficiency particulate air (HEPA) filters. ▪ Recommends the use of water-based or low-volatile organic compound (VOC) cleaning. ▪ For occupants with more than 250 employees, require the establishment of a transportation demand management program to reduce employee commute vehicle emissions.	Prior to building occupancy	Town of Apple Valley		
MM-AQ-7. The Project shall be designed to: ▪ Be able to achieve Leadership in Energy and Environmental Design (LEED) certification and meet or exceed California Green Building Standards (CalGreen) Tier 2 standards in effect at the time of building permit application. Documentation shall be provided to the Town of Apple Valley demonstrating that the Project meets this requirement prior to the issuance of building permits. ▪ Include the application of surface treatments (such as PURETi Coat or PlusTi) on impervious ground surfaces that lessen impervious surface-related radiative forcing. ▪ Include high efficiency particulate air (HEPA) air filtration systems within in all warehouse facilities.	During construction and operation	Town of Apple Valley		
Biological Resources				
MM-BIO-1. Conservation of Western Joshua Tree Lands. Mitigation for direct impacts to 29 western Joshua trees will be fulfilled through payment of the elected fees as described in Section 1927.3 of The Western Joshua Tree Conservation Act. In conformance with the fee	Prior to issuance of grading permits	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
schedule, mitigation will consist of payment of $1,000 for each western Joshua tree five meters or greater in height, and $500 for each western Joshua tree less than five meters in height. Alternatively, mitigation will occur through off-site conservation or through a CDFW-approved mitigation bank, or as required by an Incidental Take Permit, if received.				
MM-BIO-2. Relocation of Desert Native Plants. Prior to the issuance of grading permits, the Project applicant shall submit an application and applicable fee paid to the Town of Apple Valley for removal or relocation of protected native desert plants under Town of Apple Valley Municipal Code Chapter 9.76, as required, and shall schedule a pre-construction site inspection with the appropriate authority. In addition, a plot plan shall be approved by the appropriate Town of Apple Valley Review Authority (County Certified Plant Expert, Planning Commission, or Town Council) indicating exactly which trees or plants are authorized to be removed. The application shall include certification from a qualified western Joshua tree and native desert plant expert(s) to determine that proposed removal or relocation of protected native desert plants are appropriate, supportive of a healthy environment, and in compliance with the Town of Apple Valley Municipal Code. Protected plants subject to Town of Apple Valley Municipal Code Chapter 9.76 may be relocated on site, or within an area designated as an area for species to be adopted later. The application shall include a detailed plan for removal of all protected plants on the Project site. The plan was prepared by a qualified western Joshua tree and native desert plant expert(s). The plan shall include, but not be limited to, the following measures: ▪ Salvaged plants shall be transplanted expeditiously to either their final on-site location, or to an approved off-site area. If the plants cannot be expeditiously taken to their permanent relocation area at the time of excavation, they may be transplanted in a temporary area (stockpiled) prior to being moved to their permanent relocation site(s).	Prior to issuance of grading permits and during ground clearing activities	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
▪ Western Joshua trees shall be marked on their north facing side prior to excavation. Transplanted western Joshua trees shall be planted in the same orientation as they currently occur on the Project site, with the marking on the north side of the trees facing north at the relocation site(s). ▪ Transplanted plants shall be watered prior to and at the time of transplantation. The schedule of watering shall be determined by the qualified tree expert and desert native plant expert(s) to maintain plant health. Watering of the transplanted plants shall continue under the guidance of qualified tree expert and desert native plant expert(s) until it has been determined that the transplants have become established in the permanent relocation site(s) and no longer require supplemental watering.				
MM-BIO-3: Designated Biologist Authority. The designated biologist shall have authority to immediately stop any activity that does not comply with the biological resources mitigation measures and/or to order any reasonable measure to avoid the unauthorized take of an individual western Joshua tree.	During construction	Town of Apple Valley		
MM-BIO-4: Compliance Monitoring. The designated biologist shall be on site daily when impacts occur. The designated biologist shall conduct compliance inspections to minimize incidental take of western Joshua trees and impacts to other sensitive biological resources; prevent unlawful take of western Joshua trees; and ensure that signs, stakes, and fencing are intact, and that impacts are only occurring within the direct impact footprint (i.e., does not include the Project buffer). Weekly written observation and inspection records that summarize oversight activities and compliance inspections and monitoring activities required by the Incidental Take Permit shall be prepared.	During construction	Town of Apple Valley		
MM-BIO-5: Education Program. An education program (Worker Environmental Awareness Program [WEAP]) for all persons employed or otherwise working in the Project area shall be administered before performing impacts. The WEAP shall consist of a presentation from the designated biologist that includes a discussion of the	During construction	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
biology and status of western Joshua tree, burrowing owl, and loggerhead shrike; and other biological resources mitigation measures described in the California Environmental Quality Act document. Interpretation for non-English-speaking workers will be provided, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project area. Upon completion of the WEAP, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees who will be conducting work in the Project area.				
MM-BIO-6: Construction Monitoring Notebook. The designated biologist shall maintain a construction-monitoring notebook on site throughout the construction period, which shall include a copy of the biological resources mitigation measures with attachments and a list of signatures of all personnel who have successfully completed the education program. The notebook will include a sign-off date page for the designated biologist to sign and date each construction date that the Project is in compliance. The permittee shall ensure that a copy of the construction monitoring notebook is available for review at the Project site upon request by the California Department of Fish and Wildlife.	During construction	Town of Apple Valley		
MM-BIO-7: Pre-construction Surveys for Burrowing Owl and Avoidance. One pre-construction burrowing owl survey shall be completed no more than 14 days before initiation of site preparation or grading activities, and a second survey shall be completed within 24 hours of the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the Project site shall be resurveyed. Surveys for burrowing owl shall be conducted in accordance with protocols established in the Staff Report on Burrowing Owl Mitigation (prepared by the California Department of Fish and Game [now California Department of Fish and Wildlife]) in 2012 or current version.	**First survey** No more than 14 days before initiation of site preparation or grading activities **Second Survey** Within 24 hours of the start of site preparation or grading activities	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
If burrowing owls are detected, the burrowing owl relocation plan (Appendix J of Appendix C) shall be implemented in consultation with the Town of Apple Valley. As required by the burrowing owl relocation plan, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers will be established around occupied burrows as determined by a qualified biologist. No Project activities shall be allowed to encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that occupied burrows have been vacated or the nesting season has completed. Outside of the nesting season, passive owl relocation techniques approved by CDFW shall be implemented. Owls shall be excluded from burrows in the immediate Project area and within a buffer zone if there is a threat to the surface or subterranean burrow structure by installing one-way doors in burrow entrances. These doors will be placed at least 48 hours prior to ground-disturbing activities. The Project area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Compensatory mitigation for permanent loss of owl habitat will be provided following the guidance in the CDFW 2012 Staff Report on Burrowing Owl Mitigation or current version. Where possible, burrows will be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any wildlife inside the burrow. Should burrowing owl be located during the pre-construction survey, the Project would result in the loss of 210.6 acres of suitable habitat for burrowing owl. Mitigation for direct impacts to 210.6 acres shall be fulfilled through conservation of suitable burrowing owl habitat through the purchase of credits at a minimum of 1:1 in-kind habitat replacement of equal or better functions and values to those impacted by the Project, for a total of 210.6 acres.				

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
MM-BIO-8: Pre-construction Nesting Bird Surveys and Avoidance. Construction activities shall avoid the migratory bird nesting season (typically February 1 through August 31), to reduce any potential significant impact to birds that may be nesting on the survey area. If construction activities must occur during the migratory bird nesting season, an avian nesting survey of the Project site and within 500 feet of all impact areas must be conducted to determine the presence/absence of protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours prior to the start of construction in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans along with an appropriate buffer established around the nest, which will be determined by the biologist based on the species' sensitivity to disturbance (typically 300 feet for passerines and 500 feet for raptors and special-status species). The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when construction occurs in close proximity to an active nest buffer. No Project activities may encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined the nestlings have fledged and the nest is no longer considered active.	Within 72 hours prior to the start of construction	Town of Apple Valley		
MM-BIO-9: Pre-construction Survey for American Badger and Avoidance. A pre-construction survey for American badger shall be conducted within 10 days before initiation of site preparation or grading activities to determine the presence/absence of American badger. If discovered during the survey, an American badger mitigation and monitoring plan shall be developed. The mitigation and monitoring plan shall include avoidance and minimization measures to reduce potential impacts, as well as compensatory mitigation to offset direct or indirect impacts. The plan will be	Within 10 days before initiation of site preparation or grading activities	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
developed in consultation with the California Department of Fish and Wildlife. At a minimum, the plan shall: Identify pre-construction survey methods for American badger Describe feasible pre-construction and construction-phase avoidance methods Describe pre-construction and construction-phase relocation methods, including the possibility for passive relocation For burrows that will not be impacted by the Project, identify an appropriate construction exclusion zone for both active and natal burrows				
MM-BIO-10. Pre-Construction Survey for Desert Kit Fox and Avoidance. A pre-construction survey for desert kit fox shall be conducted within 10 days before initiation of site preparation or grading activities to determine the presence/absence of desert kit fox. If desert kit fox is detected, the desert kit fox relocation and mitigation plan shall be implemented. As required by the desert kit fox relocation and mitigation plan, if an active non-natal desert kit fox den is detected, a 200-foot no disturbance buffer will be established around the active den, unless otherwise authorized by the California Department of Fish and Wildlife. Where required buffering will not be feasible, passive relocation, as outlined in the desert kit fox relocation and mitigation plan, is allowed with concurrence from the County of San Bernardino, California Department of Fish and Wildlife, and U.S. Fish and Wildlife Service. If an active natal desert kit fox den is detected, an initial 200-foot no disturbance buffer will be established around the natal den, and this buffer will be maintained until the den can be verified to not host pups. Construction activities will not be permitted in this area until the den has been vacated. Once the den is vacated, and if in danger by construction, it can be collapsed, if deemed necessary by a qualified biologist.	Within 10 days before initiation of site preparation or grading activities	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
A report to evaluate the success of the relocation efforts and any subsequent re-occupation, if applicable, will be provided (including a comprehensive summary, tables, maps, etc.) at the end of the construction period. Data will be readily available to the California Department of Fish and Wildlife upon request. If an injured, sick, or dead desert kit fox is detected on any area associated with the Project, the designated California Department of Fish and Wildlife personnel at both the Ontario office and the Wildlife Investigation Lab will be notified as described within the desert kit fox relocation and mitigation plan.				
MM-BIO-11: Delineation of Property Boundaries. Before beginning activities that would cause impacts, the contractor shall, in consultation with the designated biologist, clearly delineate the boundaries with fencing, stakes, or flags, consistent with the grading plan, within which the impacts will take place. All impacts outside the fenced, staked, or flagged areas shall be avoided, and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area.	Prior to construction	Town of Apple Valley		
MM-BIO-12: Hazardous Waste. The applicant shall immediately stop work and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so.	During construction	Town of Apple Valley		
MM-BIO-13: Herbicides. The applicant shall limit herbicide use for invasive plant species and shall use herbicides only if it has been determined that hand or mechanical efforts are infeasible. To prevent drift, the permittee shall apply herbicides only when wind speeds are less than 7 miles per hour. All herbicide application shall be performed by a licensed applicator and in accordance with all applicable federal, state, and local laws and regulations.	During construction	Town of Apple Valley		
MM-BIO-14: Lighting. Lighting for construction activities and operations within 50 feet of the outside edge of the impact footprint containing habitat for special-status wildlife will be directed away from natural areas.	During construction	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
MM-BIO-15: Trash and Debris. The following avoidance and minimization measures shall be implemented during Project construction. Fully covered trash receptacles that are animal-proof will be installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Trash contained within the receptacles will be removed at least once a week from the Project site. Construction work areas shall be kept clean of debris, such as cable, trash, and construction materials. All construction/contractor personnel shall collect all litter, vehicle fluids, and food waste from the Project site on a daily basis.	During construction	Town of Apple Valley		
MM-BIO-16: Invasive Plant Management. In order to reduce the spread of invasive plant species, landscape plants within 200 feet of native vegetation communities shall not be on the most recent version of the Cal-IPC California Invasive Plant Inventory (http://www.cal-ipc.org/ip/inventory/index.php). Post-construction, the applicant shall continually remove invasive plant species on site by hand or mechanical methods, as feasible.	After construction	Town of Apple Valley		
MM-BIO-17: Aquatic Resources Mitigation. The off-site improvement areas support aquatic resources that are considered jurisdictional to the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). Prior to construction activity, the applicant shall coordinate with the Lahontan RWQCB (Region 6) and CDFW (Inland Deserts Region 6) to assure conformance with applicable and relevant discretionary permitting requirements. The Project shall mitigate to ensure no-net-loss of state waters at a minimum of 1:1 with re-establishment credits (0.12-acre RWQCB/CDFW) for impacts on aquatic resources as a part of an overall strategy to accomplish no net loss, or at a higher ratio if re-establishment credits are not available. Mitigation shall be completed through use of a mitigation bank (e.g., West Mojave	Prior to, during, and after construction	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
Mitigation Bank) or other applicant-sponsored mitigation. Final mitigation ratios and credits shall be determined in consultation with the RWQCB and/or CDFW based on agency evaluation of current resource functions and values and through each agency's respective permitting process. Should applicant-sponsored mitigation be implemented, a habitat mitigation and monitoring plan shall be prepared in accordance with State Water Resources Control Board guidelines and approved by the agencies in accordance with the proposed program permits. The habitat mitigation and monitoring plan will include but is not limited to a conceptual planting plan including planting zones, grading, and irrigation, as applicable; a conceptual planting plant palette; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria.				
Cultural and Tribal Cultural Resources				
MM-CUL-1. Workers Environmental Awareness Program (WEAP) Training. All construction personnel and monitors who are not trained archaeologists shall be briefed regarding unanticipated discoveries prior to the start of construction activities. A basic presentation shall be prepared and presented by a qualified archaeologist to inform all personnel working on the Project about the archaeological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the on-call archaeologist and if appropriate, Tribal representative. Necessity of training attendance shall be stated on all construction plans.	Prior to the start of construction activities	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
MM-CUL-2. On-Call Archaeological Construction Monitoring. In consideration of the general sensitivity of the Project site for cultural resources, a qualified archaeologist shall be retained to conduct spot monitoring as well as on call response in the case of an inadvertent discovery of archaeological resources. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, shall oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits. The archaeologist shall be responsible for maintaining monitoring logs. Following the completion of construction, the qualified archaeologist shall provide an archaeological monitoring report to the lead agency and the SCCIC with the results of the cultural monitoring program.	During grading phases and following the completion of construction	Town of Apple Valley		
MM-CUL-3. Inadvertent Discovery of Archaeological Resources. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the Project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act (14 CCR 15064.5(f); California PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted. If the discovery is Native American in nature, consultation with and/or monitoring by a Tribal representative may be necessary.	During construction	Town of Apple Valley		
MM-CUL-4. In the event that cultural resources are discovered during Project activities, all work in the immediate vicinity of the discovery (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the Project outside	During Project activities	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
of the buffered area may continue during this assessment period. Additionally, the consulting Tribe(s) shall be contacted, as detailed within MM-CUL-7, regarding any pre-contact and/or historic-era resources of a Native American origin and be provided information after the archaeologist makes his/her initial assessment of the nature of the discovery.				
MM-CUL-5. If significant pre-contact and/or historic-era tribal cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to the consulting Tribe(s) for review and comment, as detailed within MM-CUL-8. The archaeologist shall monitor the remainder of the Project and implement the Plan accordingly.	During construction	Town of Apple Valley		
MM-CUL-6. If human remains or funerary objects are encountered during any activities associated with the Project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the Project.	During Project activities	Town of Apple Valley		
MM-CUL-7. The consulting Tribe(s) shall be notified, as detailed in MM-CUL-4, of any pre-contact and/or historic-era cultural resources discovered during Project implementation and be provided information regarding the nature of the discovery, so as to provide tribal input with regards to significance and treatment. Should the discovery be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with the consulting Tribe(s), and all subsequent discoveries shall be subject to this Plan. This Plan shall allow for a monitor to be present representing the consulting Tribe(s) for the remainder of the Project, should the consulting Tribe(s) elect to place a monitor on site.	During Project activities	Town of Apple Valley		
MM-CUL-8. Any and all archaeological/cultural documents created as a part of the Project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to consulting Tribe(s). The Lead Agency	During Project activities	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
and/or applicant shall, in good faith, consult with the consulting Tribe(s) throughout the life of the Project.				
MM-CUL-9. Paleontological Resources Impact Mitigation Program. Prior to commencement of any grading activity on-site, the applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the Project. The PRIMP shall be consistent with the SVP (2010) guidelines and should outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the Project site based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The qualified paleontologist shall attend the preconstruction meeting and a qualified paleontological monitor shall be on-site during all rough grading and other significant ground-disturbing activities (including augering) in previously undisturbed, fine-grained Pleistocene alluvial deposits. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find. Salvaged fossils deemed to be significant shall be donated to an accredited repository with retrievable storage such as the San Bernardino County Museum, Natural History Museum of Los Angeles County, or the Western Science Center. Costs for preparing the fossils for accessioning into the accredited repository and any associated curation fees shall be paid by the Project proponent.	Prior to commencement of any grading activities on-site	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
Greenhouse Gas Emissions				
MM-GHG-1. The Project shall implement the following measure in order to reduce operational energy source GHG emissions to the extent feasible: ▪ Commit to on-site solar generation sufficient to meet at least 75% of the Project's total operational energy requirements from within the building envelope. ▪ Install Energy Star-rated heating, cooling, lighting, and appliances. ▪ Provide information on energy efficiency, energy-efficient lighting and lighting control systems, energy management, and existing energy incentive programs to future tenants of the Project. ▪ Structures shall be equipped with outdoor electric outlets in the front and rear of the structures to facilitate use of electrical lawn and garden equipment.	Prior to the issuance of building permits	Town of Apple Valley		
MM-GHG-2. In order to reduce the amount of waste disposed at landfills, the Project would implement a 75% waste diversion program. Prior to the issuance of building permits for the Project, the Project applicant shall provide building plans that include the following solid waste reduction measures: ▪ Provide storage areas for recyclables and green waste in new construction, and food waste storage, if a pick-up service is available. ▪ Evaluate the potential for onsite composting.	Prior to the issuance of building permits	Town of Apple Valley		
MM-GHG-3. To reduce water demands and associated energy use, subsequent development proposals within the Project site would be required to implement a Water Conservation Strategy and demonstrate a minimum 20% reduction in indoor and outdoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Prior to the issuance of building permits for the Project, the Project applicant shall provide building plans that include the following water conservation measures: ▪ Install low-water use appliances and fixtures.	Prior to the issuance of first occupancy permit	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
▪ Restrict the use of water for cleaning outdoor surfaces and prohibit systems that apply water to non-vegetated surfaces. ▪ Implement water-sensitive urban design practices in new construction. ▪ Install rainwater collection systems where feasible.				
Hazards and Hazardous Materials				
MM-HAZ-1. Prior to the issuance of a grading permit, the Project Applicant shall retain a qualified environmental specialist that has documented experience in the identification, characterization, and removal of hazardous materials, such as a California licensed professional engineer, geologist, or hydrogeologist, to remove and dispose of all refuse located on the Project site, including but not limited to, the illegally dumped tires and debris currently found on site. The removal, transport, and disposal of refuse shall be done in accordance with all applicable local, state, and federal guidelines related to hazardous materials handling. Prior to the removal of refuse deposits from the site, the environmental specialist shall inspect each refuse pile for indications that the refuse may contain, or may have once contained, hazardous materials, including, but not limited to, motor oil, solvents, paints, and/or other petroleum products. In addition, the environmental specialist shall inspect the soils surrounding each refuse deposit for evidence of any contamination (staining) or volatilization of contaminants (odors).	Prior to issuance of a grading permit and during construction	Town of Apple Valley		

Mitigation Measure	Implementation Timing	Agency Responsible for Monitoring	Initials	Date
If contamination indicators are identified, work shall stop in the immediate proximity of the potential contamination. The Project Applicant and/or their construction contractor shall be responsible for engaging a qualified environmental specialist to design and perform an investigation to verify the presence and extent of contamination on the Project site. Subsurface investigation shall determine appropriate worker protection and hazardous material and disposal procedures appropriate for the Project site. Contaminated soil or groundwater determined to be hazardous shall be removed by personnel who have been trained through the Occupational Safety and Health Administration–recommended 40-hour safety program with an approved plan for groundwater extractions, soil excavation, control of contaminant releases to the air, and off-site transport or on-site treatment.				

Appendix A
Bracketed Comment Letters

Mojave Desert Air Quality Management District
Brad Poiriez, *Executive Director*
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 • Fax 760.245.2022
www.MDAQMD.ca.gov • @MDAQMD

August 25, 2023

Daniel Alcayaga, Planning Manager
Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307

Comment Letter 1

Project: Apple Valley 143 Project DEIR

Dear Mr. Alcayaga:

The Mojave Desert Air Quality Management District (District) has received a request for comments on the Draft Environmental Impact Report (EIR) for the proposed 143 Project in Apple Valley. The proposed project includes the construction and operation of 3 warehouse buildings (615,000 SF, 1,222,500 SF, and 682,500 SF) on approximately 143 acres, bound to south by Stoddard Wells rd. and to the west by the I-15 highway. The initial study determined that Project construction and operations would involve activities that would generate both short-term and long-term criteria pollutant and other emissions. 1-1

The District has reviewed the DEIR and has the following concerns with the assumptions used in the methodology of the DEIR. The DEIR states that at this time no refrigeration is being proposed as part of the project and the project applicant has no plans to lease to any tenant needing refrigerated space. However, as a specific end-user is not in place for the proposed project, a 15% High-Cube Cold Storage Warehousing and 85% High-Cube Fulfillment Center Warehousing split of the total building square footage, was applied to provide a conservative analysis in the event that a small portion of the facility is used for cold storage. 1-2

The MDAQMD is concerned that the DEIR air quality analysis has underestimated the true potential proportion of the warehouse space utilizing cold storage. Unless there is an obligation for the end-user to keep cold storage warehousing under 15% of the total building square footage, the model may be significantly underestimating emissions. Furthermore, the DEIR has determined that the project would produce significant and unavoidable impacts on criteria pollutant(s) for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (Ozone), expose sensitive receptors to substantial pollutant concentrations, and conflict with or obstruct implementation of the applicable air quality plan. Given the potentially significant impact of the project on the factors mentioned above, the District is recommending the City of Apple Valley require less than 15% of the warehousing space be utilized for cold storage. 1-3

Additionally, the District recommends the City require that the following dust mitigation measures be required for the construction portion of the development (enforceable by the District AND by the land use agency):

- Prepare and submit to the MDAQMD, prior to commencing earth-moving activity, a dust control plan that describes all applicable dust control measures that will be implemented at the project;

- Signage compliant with Rule 403 Attachment B shall be erected at each project site entrance not later than the commencement of construction.

- Use a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes to minimize visible fugitive dust emissions. For projects with exposed sand or fines deposits (and for projects that expose such soils through earthmoving), chemical stabilization or covering with a stabilizing layer of gravel will be required to eliminate visible dust/sand from sand/fines deposits.

1-4

- All perimeter fencing shall be wind fencing or the equivalent, to a minimum of four feet of height or the top of all perimeter fencing. The owner/operator shall maintain the wind fencing as needed to keep it intact and remove windblown dropout. This wind fencing requirement may be superseded by local ordinance, rule or project-specific biological mitigation prohibiting wind fencing.

- All maintenance and access vehicular roads and parking areas shall be stabilized with chemical, gravel or asphaltic pavement sufficient to eliminate visible fugitive dust from vehicular travel and wind erosion. Take actions to prevent project-related trackout onto paved surfaces, and clean any project-related trackout within 24 hours. All other earthen surfaces within the project area shall be stabilized by natural or irrigated vegetation, compaction, chemical or other means sufficient to prohibit visible fugitive dust from wind erosion.

- Obtain District permits for any miscellaneous process equipment that may not be exempt under District Rule 219 including, but not limited to: Internal Combustion Engines with a manufacture's maximum continuous rating greater than 50 brake horsepower.

Thank you for the opportunity to review this planning document. If you have any questions regarding this letter, please contact me at (760) 245-1661, extension 6726, or Bertrand Gaschot at extension 4020.

Sincerely,

1-5

Chris Anderson
Planning and Air Monitoring Supervisor

CA/bg

September 29, 2023

Comment Letter 2

Daniel Alcayaga
Planning Manager
Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, California 92307
dalcayaga@applevalley.org

Sent via email

Dear Daniel Alcayaga:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Apple Valley 143 (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2022070019. The Project proposes the construction and operation of three industrial/warehouse buildings totaling 2,520,000 square feet on an approximately 143-acre site. The proposed industrial/warehouse buildings are anticipated to consist of 85% High-Cube Fulfillment Center Warehousing, and 15% High-Cube Cold Storage Warehousing. The proposed Project would result in 4,855 daily vehicle trips along local roadways, including 1,473 heavy-duty truck trips.[1] The Project is proposed within portions of the Town of Apple Valley (Town), California, which is the lead agency for California Environmental Quality Act (CEQA) purposes. 2-1

If approved, the Project will expose nearby communities to elevated levels of air pollution beyond the existing baseline emissions at the Project site. Residences are located southeast, and east of the Project site. The closest residence is located approximately 1,140 feet southeast of the Project site. Industrial facilities, like the facilities described in the Project, can result in high volumes of heavy-duty diesel truck traffic, and operation of on-site equipment (e.g., forklifts and yard tractors) that expose nearby residences to toxic diesel emissions such as diesel particulate matter (Diesel PM), and contribute to regional air pollution and global climate change.[2] 2-2

Governor Gavin Newsom signed Executive Order N-79-20 on September 23, 2020. The Executive Order states: "It shall be a goal of the State that 100% of in-state sales of new 2-3

[1] Town of Apple Valley. Apple Valley 143 Draft Environmental Impact Report. Appendix I. Table 2. Page 24. Accessible at *https://files.ceqanet.opr.ca.gov/279899-2/attachment/SoY3oPl-qnYg1LZqgvBQQHivCY9oMf3SNBskSJioWYcU9IEWNqkGmDPWxhRuuYxIHdbkY2lSDhilZGzd0*

[2] With regard to greenhouse gas emissions from this project, CARB has been clear that local governments and project proponents have a responsibility to properly mitigate these impacts. CARB's guidance, set out in detail in the Scoping Plan issued in 2017, makes clear that in CARB's expert view, local mitigation is critical to achieving climate goals and reducing greenhouse gases below levels of significance.

passenger cars and trucks will be zero-emission by 2035. It shall be a further goal of the State that 100% of medium and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks. It shall be further a goal of the State to transition to 100% zero-emission off-road vehicles and equipment by 2035 where feasible." The Executive Order further directs the development of regulations to help meet these goals. To ensure that lead agencies, like the Project, stay in step with evolving scientific knowledge to protect public health from adverse air quality and greenhouse gas impacts from the transportation sector, which serves as the basis of the Governor's Executive Order N-79-20, CARB staff urges the Town to plan for the use of zero-emission technologies within the Project area recommended in this letter.

2-3 cont.

The DEIR Uses Inappropriate Trip Lengths When Modeling the Project's Air Quality Impacts from Mobile Sources

The Project's operational mobile source air pollutant emissions may have been underestimated in the DEIR by using vehicle trip lengths unsupported by substantial evidence. The Project's operational air pollutant emissions were estimated using the California Emissions Estimator Model (CalEEMod). Based on CARB's review of the CalEEMod outputs found in Appendix B-1 (Air Quality & GHG Emissions Estimates) of the DEIR, the Town assumed heavy-duty trucks would travel a distance of 40 miles in the estimate of the Project's mobile source air pollution emissions.[3]

Chapter 4.2 (Air Quality) of the DEIR states that the 40-mile truck trip lengths were based on the trip distance recommended by the South Coast Air Quality Management District (SCAQMD). Although 40 miles would be an appropriate trip distance to evaluate the air quality impacts of a warehouse facility located within the SCAQMD, the proposed Project is located in the Mojave Desert Air Quality Management District (MDAQMD) where major maritime freight hubs (e.g., Port of Long Beach and Port of Los Angeles) are much further as compared to a proposed warehouse facility in the SCAQMD. The proposed Project site is located approximately 107 miles from the Port of Long Beach and Port of Los Angeles. If freight is transported by truck from these ports to the Project site, those trucks would need to travel significantly further than the trip distances assumed in the Project's air quality analysis.

2-4

CARB is concerned that the Town underestimated the Project's mobile sources emissions in the DEIR. CARB urges the Town to substantiate the chosen 40-mile trip length, or to remodel the Project's mobile source air pollutant emissions using updated Project-specific trip lengths supported by substantial evidence and to report those findings in the Project's

[3] Town of Apple Valley. Apple Valley 143 Draft Environmental Impact Report. Appendix B-I. Accessible at *https://files.ceqanet.opr.ca.gov/279899-2/attachment/QOgjWYacrrKeDOd1uDjRBw5XC6E6QpLdTkHFt1vwi2k0qxhTSSDqhvg8INJb92SmsEmynzWL7P5WRQpF0*

Final Environmental Impact Report (FEIR). Furthermore, the truck traffic proposed in the DEIR would travel outside of the MDAQMD and would likely traverse through neighboring air districts such as the SCAQMD to reach their final destinations. Since it is likely that the Project's truck traffic would transverse through the SCAQMD, the Project's mobile source air pollutant emissions should be compared to the SCAQMD's respective significance thresholds and reported in the FEIR.

2-4 cont.

The Health Risk Assessment Used Inappropriate Assumptions When Modeling the Project's Health Risk Impacts from On-Site Transport Refrigeration Units

According to the Project Description in the DEIR, 15% of the proposed industrial/warehouse buildings would be used for High-Cube Cold Storage Warehousing. Warehouses containing cold storage are serviced by trucks with transport refrigeration units (TRU) to transport refrigerated goods to and from the facility. Based on CARB's research, TRUs on trucks and trailers can emit large quantities of diesel exhaust while operating at a facility.[4] Residences and other sensitive receptors (e.g., daycare facilities, senior care facilities, and schools) located near the Project would be exposed to diesel emissions that would result in significant cancer risk.[5] CARB has reviewed the Project's HRA and has concerns regarding the assumptions used to estimate the Project's health impacts.

The HRA assumed all TRUs visiting the Project site would not idle longer than 30 minutes. Data obtained by CARB staff indicates that TRUs can operate for as long as two hours per visit, which is well above the 30-minute duration assumed in the HRA. Unless the Town restricts TRU idling durations to less than 30 minutes, the Project's HRA should be revised to assume a TRU idling duration supported by substantial evidence.

2-5

The HRA prepared for the Project assumed 358 of the Project's 1,473 daily heavy-duty truck traffic would consist of trucks equipped with TRUs. It is unclear in the HRA how this estimate was derived; CARB urges the Town to provide substantial evidence to support this assumption. Since 15% of the proposed industrial/warehouse building would be used for cold storage, it is reasonable to assume that a good portion of the trucks transporting frozen freight to the Project site would be equipped with TRUs. If the Town plans to allow a maximum of 358 trucks with TRUs to access the Project site per day, the Town must indicate

[4] CARB, 2021. Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate, Appendix F, Applicable Facility Determination Methodology, III. A. Refrigerated Warehouses or Distribution Centers. Accessible at *https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appf.pdf*

[5] CARB, 2021. Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate, Appendix I, Health Analyses: Transport Refrigeration Units, II. F. 4. Health Risk Assessment – Summary of Cancer Risk, Accessible at *https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appf.pdf*

2-5 cont.

in the FEIR that it will require tenant lease agreements to restrict the number of trucks with TRUs accessing the Project site to 358 per day.

The DEIR Does Not Analyze Potential Air Pollutant Emissions from the Project's Transport Refrigeration Units

Although the HRA prepared for the Project evaluated cancer risks from the operation of on-site and off-site TRUs, the Town did not model and report air pollutant emissions from TRUs in the DEIR. The air pollutant emission estimates, found in Table 4.2-11 (Estimated Maximum Daily Operation Criteria Air Pollutant Emissions - Unmitigated) of the DEIR, were modeled using the California Emissions Estimator Model (CalEEMod). Although CalEEMod can estimate air pollutant emissions from area, energy, and mobile sources, the current version of CalEEMod does not account for air pollutant emissions from TRUs. Since a portion of the Project will be used for cold storage, CARB urges the Town to model and report the Project's air pollution emissions from TRUs using CARB's latest emission factors. As indicated above, the Town should assume that a conservative percentage of the Project's truck fleet is equipped with TRUs and should assume a conservative idling duration for each TRU.

2-6

The Final Environmental Impact Report Should Include More Mitigation Measures to Further Reduce the Project's Air Pollution Emissions

The DEIR concluded that the Project's unmitigated operational emissions of oxides of nitrogen (NOx), carbon monoxide (CO), and particulate matter less than 10 micrometers in diameter (PM10) would exceed the MDAQMD's significance thresholds, resulting in a significant impact on air quality. To mitigate the Project's air quality impacts, the Town included three mitigation measures (MM-AQ-1 through MM-AQ-3) in the DEIR. These mitigation measures include requiring the use of "Super-Compliant" low-volatile organic compound paints, requiring that all generators and diesel-fueled off-road construction equipment of 75 horsepower or greater be equipped with Tier 4 Final compliant engines during Project construction, requiring all cargo handling equipment to be zero-emission, requiring all onsite diesel-fueled emergency generators be equipped with Tier 4 Final compliant engines, and requiring installation of charging infrastructure for electric vehicles and trucks. After the implementation of these mitigation measures, the Town concluded that the Project would result in a significant and unavoidable impact on air quality.

2-7

The list below details the CARB regulations that will result in the reduction of diesel PM and NOx emissions from trucks within California:

- **Drayage Truck Regulation:** The existing Drayage Truck Regulation requires all drayage trucks to operate with an engine that is a 2007 model year or newer.

2-8

- **Truck and Bus Regulation:** The Truck and Bus Regulation requires all trucks, including drayage, to have 2010 or newer model year engines by January 1, 2023.
- **Heavy-Duty Low-NOx Omnibus Rule:** The Heavy-Duty Low-NOx Omnibus Rule that requires truck emission standards to be reduced from 0.20 to 0.05 grams per brake horsepower-hour (g/bhp-hr) from 2024 to 2026, and to 0.02 g/bhp-hr in 2027.
- **Advanced Clean Trucks Regulation:** The Advanced Clean Trucks Regulation, approved by CARB on June 25, 2020, requires manufacturers to start the transition from diesel trucks and vans to zero-emission trucks beginning in 2024. The rule is expected to result in about 100,000 electric trucks in California by the end of 2030 and about 300,000 by 2035. The Advanced Clean Trucks regulation is part of CARB's overall approach to accelerate a large-scale transition to zero-emission medium-and heavy-duty vehicles. CARB approved amendments to the Advanced Clean Trucks regulation in March 2021; the amendments help ensure that more zero-emission vehicles are brought to market. CARB directed staff to ensure that fleets, businesses, and public entities that own or direct the operation of medium- and heavy-duty vehicles in California purchase and operate ZEVs to achieve a smooth transition to ZEV fleets by 2045 everywhere feasible, and specifically to reach:
    - 100% zero-emission drayage trucks, last mile delivery, and government fleets by 2035
    - 100% zero-emission refuse trucks and local buses by 2040
    - 100% zero-emission capable utility fleets by 2040
- **Advanced Clean Fleets Regulation:** The Advanced Clean Fleets Regulation is part of CARB's overall strategy to accelerate a large-scale transition to zero-emission medium- and heavy-duty vehicles. This regulation works in conjunction with the Advanced Clean Trucks regulation. The regulation applies to trucks performing drayage operations at seaports and railyards, fleets owned by State, local, and federal government agencies, and high priority fleets. High priority fleets are those entities that own, operate, or direct at least one vehicle in California, and that have either $50 million or more in gross annual revenue, or that own, operate, or have common ownership or control of a total of 50 or more vehicles. The regulation affects medium- and heavy-duty on-road vehicles with a gross vehicle weight rating greater than 8,500 pounds, off-road yard tractors, and light-duty mail and package delivery vehicles. All drayage trucks entering seaports and intermodal railyards would be required to be zero-emission by 2035.

2-8 cont.

CARB applauds the Town for including mitigation measures in the DEIR that would require the use of electric onsite equipment, zero-emission passenger vehicles and trucks, and the infrastructure to support those equipment and vehicles; specifically in Mitigation Measure MM-AQ-3. However, to further reduce the emissions from on-site TRUs, CARB urges the Town to include an operational mitigation measure to Mitigation Measure MM-AQ-3 that

2-9

would require the installation of infrastructure to support electric TRUs visiting the Project site. Additionally, Mitigation Measure MM-AQ-3 would require the installation of at least four heavy-duty truck charging stations on-site by 2030. To support trucks complying with the Advanced Clean Fleets regulation, CARB urges the City to modify its Mitigation Measures to increase electric infrastructure sooner than 2030. 2-9 cont.

Although CARB is encouraged by the mitigations in the DEIR that promote the use of zero-emission equipment and vehicles, more can be done to further reduce the Project's air pollution emissions. CARB urges the Town to include a mitigation measure or project design feature that requires all heavy-duty trucks to be electric. As presented above, CARB has many regulations that promote and eventually require the use of electric trucks at freight facilities such as the proposed Project. Specifically, the Advanced Clean Fleet Regulation would require all drayage trucks in California to be zero-emission by 2035. A list of commercially available zero-emission trucks can be obtained from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP).[6] The HVIP is a part of California Climate Investments to incentivize the purchase of zero-emission trucks. Based on CARB's review of the zero-emission trucks listed in the HVIP, there are commercially available electric trucks that can meet the freight transportation needs of individual industrial uses under the proposed Project today. 2-10

In addition to the mitigation modifications recommended above, the Town should add the air pollutant emission reduction measures listed below in the FEIR.

- In construction contracts, include language that requires 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-NOx standard starting in the year 2022.[7]
- Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than two minutes while on site.

Conclusion

Although CARB applauds the Town for including mitigation measures that promote the use of electric equipment and vehicles, CARB is concerned that the construction and operation of the Project may negatively impact the air quality in the surrounding community. CARB urges the Town to include a mitigation measure or project design feature requiring all 2-11

[6] Zero-Emission Truck and Bus Voucher Incentive Project. Accessible at: *https://californiahvip.org/*

[7] In 2013, CARB adopted optional low-NOx emission standards for on-road heavy-duty engines. CARB encourages engine manufacturers to introduce new technologies to reduce NOx emissions below the current mandatory on-road heavy-duty diesel engine emission standards for model-year 2010 and later. CARB's optional low-NOx emission standard is available at: *https://ww2.arb.ca.gov/our-work/programs/optional-reduced-nox-standards* .

trucks accessing the Project site to be zero emission. CARB also urges the Town to use Project-specific truck distances when evaluating the Project's mobile air quality impacts, to provide substantial evidence supporting the 30-minute TRU duration used in the Project's HRA, and to model air pollutant emissions from TRUs visiting the Project site.

Given the breadth and scope of projects subject to CEQA review throughout California that have air quality and greenhouse gas impacts, coupled with CARB's limited staff resources to substantively respond to all issues associated with a project, CARB must prioritize its substantive comments here based on staff time, resources, and its assessment of impacts. CARB's deliberate decision to substantively comment on some issues does not constitute an admission or concession that it substantively agrees with the lead agency's findings and conclusions on any issues on which CARB does not substantively submit comments.

2-11 cont.

CARB appreciates the opportunity to comment on the DEIR for the Project and can provide assistance on zero-emission technologies and emission reduction strategies, as needed. Please include CARB on your list of selected State agencies that will receive the FEIR. If you have questions, please contact Stanley Armstrong, Air Pollution Specialist via email at *stanley.armstrong@arb.ca.gov*.

Sincerely,

Richard Boyd, Assistant Division Chief, Transportation and Toxics Division

2-12

cc: State Clearinghouse
state.clearinghouse@opr.ca.gov

Yassi Kavezade, Organizer, Sierra Club
yassi.kavezade@sierraclub.org

Alan De Salvio, Deputy Director of Mojave Desert Operations
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October 2, 2023

Daniel Alcayaga, Planning Manager
Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307

VIA EMAIL TO:
dalcayaga@applevalley.org

SUBJECT: COMMENTS ON APPLE VALLEY 143 EIR (SCH NO. 2022070019)

Dear Mr. Alcayaga,

Thank you for the opportunity to comment on the Environmental Impact Report (EIR) for the proposed Apple Valley 143 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. 3-1

1.0 Summary

The project proposes the construction and operation of three industrial/warehouse buildings and associated improvements on 143 acres of vacant land. Building 1 (the southernmost building) is 615,000 square feet, Building 2 (the center building) is approximately 1,222,500 square feet, and Building 3 (the northernmost building) is approximately 682,500 square feet. In total, the Project proposes 2,520,000 square feet of industrial/warehouse space. Since a specific end-user is not in place for the proposed project, a 15% High-Cube Cold Storage Warehousing and 85% High-Cube Fulfillment Center Warehousing split of the total building square footage, was applied for purposes of environmental analysis. 3-2

Buildings 1 and 3 have a maximum building height of 50 feet and Building 2 has a maximum building height of 52 feet. Building 1 proposes a floor area ratio (FAR) of 0.451, Building 2 proposes a FAR of 0.391, and Building 3 proposes a FAR of 0.420.

Building 1 proposes a cross-dock configuration with 70 truck/trailer loading docks on the north side of the building and 60 truck/trailer loading docks on the south side of the building. The Building 1 site includes 144 truck/trailer parking spaces and 303 passenger vehicle parking spaces. Building 2 proposes a cross-dock configuration with 102 truck/trailer loading docks on the north side of the building and 102 truck/trailer loading docks on the south side of the building. The Building 2 site includes 417 truck/trailer parking spaces and 604 passenger vehicle parking spaces. Building 3 proposes a cross-dock configuration with 46 truck/trailer loading docks on the north side of the building and 66 truck/trailer loading docks on the south side of the building. The Building 3 site includes 198 truck/trailer parking spaces and 373 passenger vehicle parking spaces. 3-2 Cont.

The Project also involves the off-site construction of Outer I-15 Road on the eastern boundary of the Project Site, which will be a publicly accessible road.

4.2 Air Quality, 4.5 Energy, and 4.6 Greenhouse Gas Emissions

Please refer to attachments from SWAPE for a complete technical commentary and analysis. 3-3

The EIR does not include meaningful analysis of relevant environmental justice issues in reviewing potential impacts, including cumulative impacts from the proposed 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. All of these environmental factors are attributed to heavy truck activity in the area. 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]. 3-4

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.

3-4 Cont.

California's Building Energy Code Compliance Software (CBECC) is the State's only approved energy compliance modeling software for non-residential buildings in compliance with Title 24[9]. 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 EIR did not accurately or adequately model the energy impacts in compliance with Title 24, a finding of significance must be made. A revised EIR with modeling using the approved software (CBECC) must be circulated for public review in order to adequately analyze the project's significant environmental impacts. This is vital as the EIR utilizes CalEEMod as a source in its methodology and analysis, which is clearly not the approved software.

3-5

4.9 Land Use and Planning

The EIR 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

3-6

[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

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 a revised EIR must be prepared with a consistency analysis in order to provide an adequate and accurate environmental document:

1. 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)

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

3. 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)

4. 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.

5. Air Quality Element Policy 1.A The Town shall cooperate with the Mojave Desert Air Quality Management District to assure compliance with air quality standards.

6. 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.

7. 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.

8. Air Quality Element Policy 1.D All proposals for development activities within the Town shall be reviewed for their potential to adversely impact local and regional air quality and shall be required to mitigate any significant impacts.

9. Air Quality Element Program 1.D.1 All projects that have the potential to generate significant levels of air pollution shall be required to provide detailed impact analyses and design mitigation measures that incorporate the most advanced technological methods available. Prior to the issuance of grading or demolition permits, the Town shall review and determine the effectiveness of proposed mitigation measures and set forth additional measures as needed.

3-6 Cont.

10. Air Quality Element Program 1.F.1 To minimize vehicle miles traveled, the Town shall pursue a balance of employment and housing opportunities that encourage pedestrian and other non-motorized transportation alternatives.

11. Air Quality Element Program 1.F.4 Shade trees with non-damaging root systems shall be planted in medians, within street easement, and parking lots as appropriate, to cool the asphalt and reduce Reactive Organic Compounds (ROC) and Volatile Organic Compounds (VOC) generated by streets and parking lots. A list of permitted trees with non-damaging root systems shall be developed.

12. Air Quality Element Policy 1.G Future residential, commercial, and industrial development and remodeling projects, shall strive to exceed Title 24 standards by 15% and/or achieve LEED certification or similar performance standards for buildings.

13. Air Quality Element Policy 1.H Residential, commercial, and industrial projects that reduce vehicle miles traveled (VMTs) by providing alternative transportation options, home office and live/work spaces, and/or promote employees living close to work are preferred.

14. Air Quality Element Program 1.H.1 The Town shall encourage all new development to include wiring for high speed internet for all tenants and/or residents.

15. Land Use Element Goal 6 Commercial development shall strengthen the local economy and enhance the quality of life. Policy 6.A Commercial development shall be permitted only in areas with provisions for adequate circulation, utilities, infrastructure and public services.

16. Land Use Element Goal 7 Industrial development which supports a broad-based economy, and encourages the jobs-housing balance.

17. Land Use Element Policy 7.A Industrial development shall be permitted only in areas with provisions for adequate circulation, utilities, infrastructure and public services.

18. Land Use Element Program 7.A.1 Industrial development projects will be required to extend adequate infrastructure, utilities and public services prior to occupancy.

3-6 Cont.

Appendix I: Transportation Impact Analysis determined the following Caltrans jurisdiction is identified to experience significant and unavoidable impacts resulting from the project:

1. I-15 NB Ramps - Outer I-15/Stoddard Wells Road – LOS F in AM and PM peak hours

3-7

Any improvements constructed or in-lieu fees/fair share fees paid for the I-15 are beyond the control/scope of the lead agency. An assessment of fees is appropriate when linked to a specific mitigation program. (*Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, *Save our Peninsula Comm. v. Monterey County Bd. Of Supers.* (2001) 87 Cal.App.4th 99, 141.) Payment of fees is not sufficient where there is no evidence mitigation will actually result. (*Gray v. County of Madera* (2008) 167 Cal.App.4th 1099,1122.) The assessment of fees here is not adequate as there is no evidence mitigation will actually result. The improvements required are not part of an existing DIF/TUMF program and therefore are not planned to occur at all or by any certain date, whether by Apple Valley or Caltrans. Any improvements recommended or fees paid to mitigate impacts for the I-15 are beyond the control of the lead agency and evidence that these improvements will be completed or approved by Caltrans has not been provided. The EIR must be revised and recirculated to include the LOS analysis as cumulatively considerable significant impact as the project conflicts with Transportation Impact Threshold A and Land Use and Planning Impact Threshold B because it is not consistent with the following General Plan policy:

1. 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

3-7 Cont.

Further, the EIR 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 Air Quality because it will exceed the numerical thresholds of significance established by the Mojave Desert Air Quality Management District for emissions of oxides of nitrogen, and particulate matter with an aerodynamic diameter less than or equal to 10 microns, and conflict with the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert Air Basin. The project will also have a significant and unavoidable cumulatively considerable impact to Greenhouse Gas Emissions because it will conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions and result in net annual emissions that exceed the GHG emissions significance threshold of 3,000 MTCO2e/yr. The Land Use and Planning analysis omits any discussion regarding inconsistencies with the AQMP and California's statewide GHG reduction goals for 2030 and 2050. The EIR must be revised to include these significant and unavoidable cumulatively considerable impacts for analysis and include a finding of significance.

The EIR has not provided any information or analysis on the buildout conditions of the General Plan. Table III-41: Preferred Alternative General Plan Land Use Designation Build Out Summary:

3-8

Town & Unincorporated Lands of the General Plan EIR[10] states that the Regional Commercial land use designation will have a buildout of 12,486,488 total square feet. The proposed project's 2,520,000 square feet represents 20.2% of the General Plan buildout for this land use designation, which is significant to be attributed to a single project. The EIR 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 Regional Commercial projects such as Apple Valley I-15 Travel Center (1,165,738 square feet of regional commercial uses[11]) and Apple Valley Commercial Project (49,995 square feet of regional commercial uses[12]) cumulatively with the proposed project generates 3,735,733 square feet of regional commercial uses, which is 29.9% of the General Plan buildout capacity accounted for by only three recent projects. A revised EIR must be prepared to include this analysis in order to provide an adequate and accurate environmental analysis.

3-8 Cont.

Further, EIR also omits that the Warehouse Overlay within the Regional Commercial District was not adopted by the Town Council until January 11, 2022[13]. The Regional Commercial District did not plan for or permit warehousing/distribution uses until this date. Therefore, the proposed project is not consistent or included for analysis in any local or regional land use plans that were adopted prior to this date, including SCAG's RTP/SCS. The EIR must be revised to include this information for analysis and a finding of significance due to this inconsistency.

3-9

The EIR provides an erroneous and misleading a consistency analysis with SCAG's 2020-2045 Connect SoCal RTP/SCS. Due to errors in modeling, modeling without supporting evidence (as noted throughout this comment letter and attachments), and the EIR's conclusion the project will result in significant and unavoidable cumulatively considerable impacts to Air Quality, Greenhouse Gas Emissions, and Transportation (Including VMT), the proposed project is directly inconsistent with Goal 5 to reduce greenhouse gas emissions and improve air quality, Goal 6 to support healthy and equitable communities, and Goal 7 to adapt to a changing climate. The EIR must be revised to include a finding of significance due to these direct inconsistencies with SCAG's 2020-2045 Connect SoCal RTP/SCS.

3-10

[10] Apple Valley General Plan EIR
https://www.applevalley.org/home/showpublisheddocument/24331/636552384686570000
[11] Apple Valley I-15 Travel Center EIR https://files.ceqanet.opr.ca.gov/274469-3/attachment/-ndF-UHoO2jwK-6NRFmOkRUgw-nCtUAyFB_BVA7BCQ3XIRKPJrw9xeonWEsHsIWbmjxwYc_wlkQ2EuUh0
[12] Apple Valley Commercial Project https://ceqanet.opr.ca.gov/2021100585
[13] Town Council January 11, 2022 Meeting Agenda and Attachments
https://pub-applevalley.escribemeetings.com/FileStream.ashx?DocumentId=781

4.12 Transportation

Appendix I: Transportation Impact Analysis determined the following Caltrans jurisdiction is identified to experience significant and unavoidable impacts resulting from the project:

1. I-15 NB Ramps - Outer I-15/Stoddard Wells Road – LOS F in AM and PM peak hours

Any improvements constructed or in-lieu fees/fair share fees paid for the I-15 are beyond the control/scope of the lead agency. An assessment of fees is appropriate when linked to a specific mitigation program. (*Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, *Save our Peninsula Comm. v. Monterey County Bd. Of Supers.* (2001) 87 Cal.App.4th 99, 141.) Payment of fees is not sufficient where there is no evidence mitigation will actually result. (*Gray v. County of Madera* (2008) 167 Cal.App.4th 1099,1122.) The assessment of fees here is not adequate as there is no evidence mitigation will actually result. The improvements required are not part of an existing DIF/TUMF program and therefore are not planned to occur at all or by any certain date, whether by Apple Valley or Caltrans. Any improvements recommended or fees paid to mitigate impacts for the I-15 are beyond the control of the lead agency and evidence that these improvements will be completed or approved by Caltrans has not been provided. The EIR must be revised and recirculated to include the LOS analysis as cumulatively considerable significant impact as the project conflicts with Transportation Impact Threshold A and Land Use and Planning Impact Threshold B because it is not consistent with the following General Plan policy: 3-11

1. 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

The EIR has underreported the quantity VMT generated by the proposed project operations. The operational nature of industrial/warehouse uses involves high rates of truck/trailer/delivery van VMT due to traveling from large import hubs to regional distribution centers to smaller industrial parks and then to their final delivery destinations. Once employees arrive at work at the proposed project, they will conduct their jobs by driving delivery vans across the region as part of the daily operations as a transload facility, which will drastically increase project-generated VMT. The project's truck/trailer and delivery van activity is unable to utilize public transit or active transportation and it is misleading to the public and decision makers to exclude this activity from VMT analysis. The project's actual VMT generated is not consistent with the significance threshold and legislative intent of SB 743 to reduce greenhouse gas emissions by reducing VMT. A revised EIR must be prepared to reflect a quantified VMT analysis that includes all truck/trailer and delivery van activity.

The EIR 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. There are no exhibits adequately depicting the onsite turning radius available for trucks maneuvering throughout the site. Notably, the truck/trailer parking stalls are adjacent to the the truck/trailer loading docks for each building, and passenger vehicle spaces are located within the truck/trailer path of travel to exit/enter the Building 2 and 3 sites. These parking stalls that may be in use at any time and further restrict truck/trailer movement on the site. The EIR also states that, "the site plan would be subject to plan review by the Town's Fire Department to ensure proper access for fire and emergency response is provided and required fire suppression features are included," which is deferred mitigation to after the CEQA public review process. Deferring this environmental analysis required by CEQA to the construction permitting phase is improper mitigation, deferred mitigation, and does not comply with CEQA's requirement for meaningful disclosure and adequate informational documents. A revised EIR must be prepared to include a finding of significance due to these significant and unavoidable impacts.

3-11 Cont.

5.7 Effects Found Not to be Significant: Population and Housing

The EIR utilizes uncertain language and does not provide any meaningful analysis or supporting evidence to substantiate the conclusion that there will be no significant impacts to population and housing. For example, the EIR states regarding the project's construction and operational jobs that "the Project's temporary and permanent employment requirements could *likely* be met by the *Town's* existing labor force without people needing to relocate into the Project *region.*" The EIR specifically states that the *Town's* existing labor force will accommodate the 2,108 jobs generated by the proposed project but only cites that the "unemployment rate for San Bernardino County is at 5%." The EIR has not provided evidence that the local workforce (the Town specifically or San Bernardino County) 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 construction and operations and a revised EIR must be prepared to account for longer worker trip distances.

3-12

The EIR also states that "the Project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans." However, the Warehouse Overlay within the Regional Commercial District was not adopted by the Town Council until January 11, 2022[14]. The Regional Commercial District did not plan for or permit

[14] Town Council January 11, 2022 Meeting Agenda and Attachments
https://pub-applevalley.escribemeetings.com/FileStream.ashx?DocumentId=781

warehousing/distribution uses until this date. Therefore, the proposed project is not consistent with any local or regional land use plans that were adopted prior to this date, including SCAG's RTP/SCS. The EIR must be revised to include this information for analysis and a finding of significance due to this inconsistency.

SCAG's Connect SoCal Demographics and Growth Forecast[15] states that Apple Valley will add 12,200 jobs between 2016 - 2045. Utilizing the EIR's calculation of 2,108 employees, the project represents 17.3% 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. A revised EIR must be prepared to include this analysis, and also provide a cumulative analysis discussion of projects approved since 2016 and projects "in the pipeline" to determine if the project will exceed SCAG's employment and/or population growth forecast. For example, other recent projects such as 1M Warehouse (1,080,125 square feet of industrial/warehouse space; 1,049 employees[16]), Apple Valley Commercial Project (49,995 square feet commercial space; 75 employees[17]), and The Development at Dale Evans and Lafayette (1,207,544 square feet of industrial/warehouse space; 1,172 employees[18]) combined with the proposed project will cumulatively generate 4,712 employees, which is 38.6% of Apple Valley's employment growth forecast over 29 years accounted for by only four recent projects. These totals increase exponentially when commercial and other industrial development activity is added to the brief list of recent activity above. A revised EIR must be prepared to include this information for analysis, and also provide a cumulative analysis discussion of projects approved since 2016 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.

3-12 Cont.

6.1 Growth Inducing Impacts

The EIR has not provided an adequate or accurate cumulative analysis discussion here to demonstrate the impact of the proposed project in a cumulative setting. For example, other recent Regional Commercial projects such as Apple Valley I-15 Travel Center (1,165,738 square feet of regional commercial uses[19]) and Apple Valley Commercial Project (49,995 square feet of regional

3-13

[15] 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
[16] 1M Warehouse https://ceqanet.opr.ca.gov/2023020285
[17] Apple Valley Commercial Project https://ceqanet.opr.ca.gov/2021100585
[18] The Development at Dale Evans and Lafayette https://ceqanet.opr.ca.gov/2022120356/2
[19] Apple Valley I-15 Travel Center EIR https://files.ceqanet.opr.ca.gov/274469-3/attachment/-ndF-UHoO2jwK-6NRFmOkRUgw-nCtUAyFB_BVA7BCQ3XIRKPJrw9xeonWEsHsIWbmjxwYc_wlkQ2EuUh0

commercial uses[20]) cumulatively with the proposed project generates 3,735,733 square feet of regional commercial uses, which is 29.9% of the General Plan buildout capacity accounted for by only three recent projects. Further, other recent projects such as 1M Warehouse (1,049 employees[21]), Apple Valley Commercial Project (75 employees[22]), and The Development at Dale Evans and Lafayette (1,172 employees[23]) combined with the proposed project will cumulatively generate 4,712 employees, which is 38.6% of Apple Valley's employment growth forecast over 29 years accounted for by only four recent projects. These totals increase exponentially when commercial and other industrial development activity is added to the brief list of recent activity above. A revised EIR must be prepared to include this information for analysis, and also provide a cumulative analysis discussion of projects approved since 2016 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.

3-13 Cont.

Notably, EIR also omits that the Warehouse Overlay within the Regional Commercial District was not adopted by the Town Council until January 11, 2022[24]. The Regional Commercial District did not plan for or permit warehousing/distribution uses until this date. Therefore, the proposed project is not consistent or included for analysis in any local or regional land use plans that were adopted prior to this date, including SCAG's RTP/SCS. The EIR must be revised to include this information for analysis and a finding of significance due to this inconsistency.

7.0 Alternatives

The EIR is required to evaluate a reasonable range of alternatives to the proposed project which will avoid or substantially lessen any of the significant effects of the project (CEQA § 15126.6.) The alternatives chosen for analysis include the CEQA required "No Project" alternative and only two others - Other Development Project Alternative and Reduced Development Intensity Alternative. The EIR does not evaluate a reasonable range of alternatives as only two alternatives beyond the required No Project alternative is analyzed. The EIR does not include an alternatives that meets the project objectives and also eliminates all of the project's significant and unavoidable impacts. The EIR must be revised to include analysis of a reasonable range of alternatives and foster informed decision making (CEQA § 15126.6). This could include alternatives such as development of the site with a project that reduces all of the proposed project's significant and unavoidable impacts to less than significant level, and a mixed-use project that provides affordable

3-14

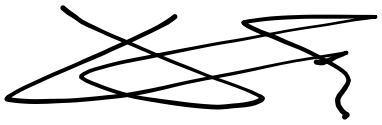
[20] Apple Valley Commercial Project https://ceqanet.opr.ca.gov/2021100585
[21] 1M Warehouse https://ceqanet.opr.ca.gov/2023020285
[22] Apple Valley Commercial Project https://ceqanet.opr.ca.gov/2021100585
[23] The Development at Dale Evans and Lafayette https://ceqanet.opr.ca.gov/2022120356/2
[24] Town Council January 11, 2022 Meeting Agenda and Attachments
https://pub-applevalley.escribemeetings.com/FileStream.ashx?DocumentId=781

housing and local-serving commercial uses that may reduce VMT, GHG emissions, and improve Air Quality. 3-14 Cont.

Conclusion

For the foregoing reasons, GSEJA believes the EIR is flawed and a revised 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. 3-15

Sincerely,



Gary Ho
Blum, Collins & Ho LLP

Attachment: SWAPE Analysis

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

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September 13, 2023

Gary Ho
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707 Wilshire Blvd, Ste. 4880
Los Angeles, CA 90017

Subject: Comments on the Apple Valley 143 Project (SCH No. 2022070019)

Dear Mr. Ho,

We have reviewed the August 2023 Draft Environmental Impact Report ("DEIR") for the Apple Valley 143 Project ("Project") located in the City of Apple Valley ("City"). The Project proposes to construct 2,520,000-square-feet ("SF") of warehouse space, 759 tractor-trailer stalls, and 1,332 passenger vehicle parking spaces on the 143-acre site.

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

3-16

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The DEIR's air quality analysis relies on emissions calculated with the California Emissions Estimator Model ("CalEEMod") Version 2020.4.0 (p. 4.6-26).[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.

3-17

[1] "CalEEMod User's Guide Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide.

Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose which parameters are used in calculating the Project's air pollutant emissions by identifying any changes to default values. Justifications are provided for each altered value.

When reviewing the Project's CalEEMod output files, provided in the Air Quality and GHG Emission Estimates ("AQ & GHG Report") as Appendix B-1 to the DEIR, we found that several model inputs were not consistent with information disclosed in the DEIR. As a result, the Project's construction and operational emissions may be underestimated. A revised 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.

3-17 Cont.

Unsubstantiated Reductions to Area Coatings Emission Factors

Review of the CalEEMod output files demonstrates that the "Apple Valley 143 – Unmitigated" and "Apple Valley 143 - Mitigated" models include several reductions to the default area coating emission factors (see excerpt below) (Appendix B-1, pp. 10, 59, 108, 165, 214, 263).

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100

As demonstrated above, the nonresidential interior and exterior emission factors are reduced from their default values of 250- to 50-grams per liter ("g/L"), and the parking area coating emission factor is reduced from the default value of 250- to 100- grams per liter ("g/L"). As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified. [2] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is:

3-18

> "Adjusted VOC content per MDAQMD Rule 1113." (Appendix B-1, pp. 9, 58, 107, 164, 213, 262).

Furthermore, the DEIR includes MDAQMD's Rule 1113 as a formal mitigation measure regarding the use of architectural coatings:

> "MM-AQ-1. The Project shall utilize "Super-Compliant" low-volatile organic compound (VOC) paints which have been reformulated to exceed the regulatory VOC limits put forth by MDAQMD's Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. Alternatively, the Project Applicant may utilize tilt-up concrete buildings that do not require the use of architectural coatings" (pp. 1-5, Table 1.1).

However, these changes remain unsubstantiated. While the DEIR substantiates the changes to the *architectural* coating factors, the DEIR fails to mention the use of *area* coatings specifically in the

[2] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 1, 14.

mitigation measure. Until the DEIR incorporates a formal mitigation measure that requires the Project to use low-VOC area coatings, we cannot verify that the above changes are accurate.

These unsubstantiated reductions present an issue, as CalEEMod uses the area coating emission factors to calculate the Project's reactive organic gas/volatile organic compound ("ROG"/"VOC") emissions.[3] By including unsubstantiated reductions to the default area coating emission factors, the model may underestimate the Project's operational ROG/VOC emissions.

3-18 Cont.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The DEIR estimates that the Project would result in net annual mitigated greenhouse gas ("GHG") emissions of 33,932.99-metric tons of carbon dioxide equivalents per year ("MT CO_2e/year") (see excerpt below) (p. 4.6-30, Table 4.6-6).

Table 4.6-6. Estimated Annual Operation GHG Emissions - Mitigated

Emissions Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	0.02	<0.01	0.00	0.03
Energy	2,159.98	0.10	0.03	2,172.12
Mobile	28,308.25	0.84	3.48	29,366.27
Off-Road Equipment - Diesel	0.00	0.00	0.00	0.00
Off-Road Equipment - Electric	1,874.43	0.16	0.02	1,884.10
Stationary	39.12	0.01	0.00	39.26
Waste	120.14	7.10	0.00	297.64
Water/Wastewater	22.58	0.28	0.01	31.66
Transport Refrigeration Units	0.86	0.00	0.00	0.86
Total	**32,525.38**	**8.49**	**3.54**	**33,791.93**
			Amortized Construction Emissions	*141.06*
			Operations with Amortized Construction GHG Emissions	**33,932.99**

Source: See Appendix B-1 for complete results.
Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
Includes implementation of MM-AQ-3 and MM-GHG-1 through MM-GHG-3.

3-19

As such, the DEIR concludes that the Project would exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year and result in a significant-and-unavoidable GHG impact, stating:

> "As depicted in Table 4.6-6, the Project would still exceed the applied threshold of 3,000 MT CO_2e per year after mitigation. No feasible mitigation measures beyond those already identified exist that would reduce these emissions to levels that are less than significant. Therefore, even with the incorporation of mitigation, long-term impacts associated with a cumulatively considerable increase in GHG emissions would be significant and unavoidable" (p. 4.6-30).

[3] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 35, 40.

However, while we agree that the Project would result in a significant GHG impact, the DEIR's assertion that this impact is significant-and-unavoidable is incorrect. According to CEQA Guidelines § 15096(g)(2):

> "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."[4]

3-19 Cont.

As indicated above, an impact can only be labeled as significant-and-unavoidable after all available, feasible mitigation is considered. Here, while the DEIR implements MM-GHG-1 through MM-GHG-3, the DEIR fails to implement *all* feasible mitigation (p. 4.6-40). Therefore, the DEIR's conclusion that Project's GHG emissions would be significant-and-unavoidable is unsubstantiated. To reduce the Project's GHG impacts to the maximum extent possible, additional feasible mitigation measures should be incorporated, such as those suggested in the section of this letter titled "Feasible Mitigation Measures Available to Reduce Emissions." The Project should not be approved until a revised EIR is prepared, incorporating all feasible mitigation to reduce emissions to less-than-significant levels.

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant GHG impacts that should be mitigated further. In an effort to reduce emissions, the Project should consider the implementation of the following mitigation measures found in the California Department of Justice Warehouse Project Best Practices document.[5]

3-20

- Requiring off-road construction equipment to be hybrid electric-diesel or zero emission, where available, and all diesel-fueled off-road construction equipment to be equipped with CARB Tier IV-compliant engines or better, and including this requirement in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.
- 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.

[4] "Cal. Code Regs. tit. 14 § 15096." California Legislature, *available at:* https://casetext.com/regulation/california-code-of-regulations/title-14-natural-resources/division-6-resources-agency/chapter-3-guidelines-for-implementation-of-the-california-environmental-quality-act/article-7-eir-process/section-15096-process-for-a-responsible-agency.

[5] "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.

- 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.
- Forbidding idling of heavy equipment for more than three minutes.
- 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.
- Using paints, architectural coatings, and industrial maintenance coatings that have volatile organic compound levels of less than 10 g/L.
- 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.
- Requiring all heavy-duty vehicles engaged in drayage to or from the project site to be zero-emission beginning in 2030.
- Requiring all on-site motorized operational equipment, such as forklifts and yard trucks, to be zero-emission with the necessary charging or fueling stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Forbidding trucks from idling for more than three minutes and requiring operators to turn off engines when not in use.
- 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.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity that is equal to or greater than the building's projected energy needs, including all electrical chargers.
- Designing all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible.
- 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.
- Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide refrigerated warehouse space, constructing electric plugs for electric transport refrigeration units at every dock door and requiring truck operators with transport refrigeration units to use the electric plugs when at loading docks.
- Oversizing electrical rooms by 25 percent or providing a secondary electrical room to accommodate future expansion of electric vehicle charging capability.

3-20 Cont.

- 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.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.
- Designing to LEED green building certification standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.
- Posting signs at every truck exit driveway providing directional information to the truck route.
- Improving and maintaining vegetation and tree canopy for residents in and around the project area.
- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants who own, operate, or hire trucking carriers with more than 100 trucks to use carriers that are SmartWay carriers.
- Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

3-20 Cont.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation.

Furthermore, as it is policy of the State that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045, we emphasize the applicability of incorporating solar power system into the Project design. Until the feasibility of incorporating on-site renewable energy production is considered, the Project should not be approved.

A revised EIR should be prepared to include all feasible mitigation measures, as well as include updated GHG analyses to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The revised EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

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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.

3-22

Sincerely,

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

Paul E. Rosenfeld, Ph.D.

Attachment A: Matt Hagemann CV

Attachment B: Paul Rosenfeld CV

3-23

to end

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

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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

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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.

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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.

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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.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

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.

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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

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Mitchell M. Tsai
Law Firm

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

VIA E-MAIL

October 02, 2023

Daniel Alcayaga, Planning Manager
Town of Apple Valley
14955 Dale Evans Parkway
Em: dalcayaga@applevalley.org

Comment Letter 4

RE: Town of Apple Valley, Apple Valley 143

Dear Daniel Alcayaga:

On behalf of the Southwest Mountain States Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWMSRCC**"), my Office is submitting these comments for the Town of Apple Valley's DEIR Comment Period addressing the Apple Valley 143 Project. 4-1

SWMSRCC would like to express its support for this Project. After further reviewing this Project, SWMSRCC believes that the Project will benefit the environment and the local economy by practicing protocols that will protect worker health and safety and will incorporate adequate environmental mitigation.

Should the Town have any questions or concerns, the Town should feel free to contact my office.

Sincerely,

Mitchell M. Tsai
Attorneys for Southwest Mountain States
Regional Council of Carpenters

From: Richard Bunck <richardbunck@gmail.com>
Sent: Monday, October 2, 2023 5:13 PM
To: Daniel Alcayaga
Subject: Project 143

Comment Letter 5

Dear Mr. Alcayaga and concerned parties

The EIR seems through and definitive. On a micro scale, it covers all bases. Although on a macro scale it misses a huge impact on the high desert as a whole. In a word, that impact is traffic. The high desert has one viable artery in and out. That is of course the 15 fwy.
The trend for a long period of time has been increasing traffic, increasing travel times and decreasing opportunities to travel north or south bound without traffic jams. Any objective observation of the current traffic on the 15 could be summarized in one word, gridlock. Because of a huge barrier called the san Bernardino national forest, there is, in the foreseeable future, no mediation or relief.

With both residential, commercial and industrial building moving along at a brisk pace in the high desert, the traffic situation can only get worse.
If you want to own a home in the high desert, you will be working down the hill. The Vegas traffic continues to increase. Commercial truck traffic Has increased geometrically. No one has a plan to alleviate this traffic disaster. 5-1

Good planning would mandate that the infrastructure should in place before the demand for the infrastructure is created. How can any EIR be so micro In its its scope as to not look beyond the town limits of Apple Valley.

Because people are so busy working and commuting, so you don't hear from them. This does not mean they are happy with the situation.
They have entrusted you, the town employees and elected officials to look after their well being in regards to the above mentioned matters.

Please look to the greater good for Apple Valley and the high desert as you consider a huge project like this.

Thank You, Richard Bunck

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

Comment Letter 6

October 27, 2023

Daniel Alcayaga
Planning Manager
Town of Apple Valley
dalcayaga@applevalley.org

Re: Apple Valley 143 EIR, SCH Number 2022070019

Dear Mr. Alcayaga:

On behalf of the Golden State Environmental Justice Alliance ("GSEJA"), I am writing to you regarding the Apple Valley 143 EIR, SCH Number 2022070019 ("Project").

GSEJA is withdrawing its comment letter on and opposition to the Project. The Project's developer has addressed GSEJA's concerns about environmental mitigation. 6-1

Sincerely,

Joe Bourgeois
Executive Director

Appendix B

CalEEMod and Streetlight Data

MEMORANDUM

URBAN CROSSROADS

DATE: October 19, 2023
TO: Ronald Rakunas, Covington
FROM: Alex So, Haseeb Qureshi
JOB NO: 15692-01 Sup Truck VMT

APPLE VALLEY 143 SUPPLEMENTAL TRUCK TRIP LENGTH ASSESSMENT

Urban Crossroads, Inc. is pleased to provide the following Supplemental Truck trip length Assessment for the Apple Valley 143 (**Project**), which is located east of Interstate 15 (I-15), north of Stoddard Wells Road, and south of Johnson Road, in the Town of Apple Valley.

PROJECT OVERVIEW

It is our understanding that the project is to consist of the construction of 2,518,500 square feet industrial uses. In total the Project would construct three buildings as follows:

- Building 1 - 615,000 square feet
- Building 2 – 1,221,000 square feet
- Building 3 – 682,500 square feet

SUPPLEMENTAL EVALUATION

In an effort to fully disclose potential truck travel distances that enter an exit the South Coast Air Basin (SCAB) generated by the proposed Project, this memorandum includes a supplemental assessment measuring Project's potential truck activity in and out of the SCAB. For purposes of this analysis, truck travel lengths were obtained using StreetLight™ Data's Truck Volume Metrics for medium-duty trucks (MDT) (2 and 3 axle trucks) and heavy-duty trucks (HDT) (4+ axle trucks).

ABOUT STREETLIGHT™ DATA[1]

StreetLight™ Data's Truck Volume Metrics rely on five linked machine-learning models to estimate vehicle volume and trip length for various vehicle classes and total vehicles. These metrics cover data from 2019 through 2021. To provide volume

[1] SteetLight Insight Truck Volume Methodology and Validation (September 2022).

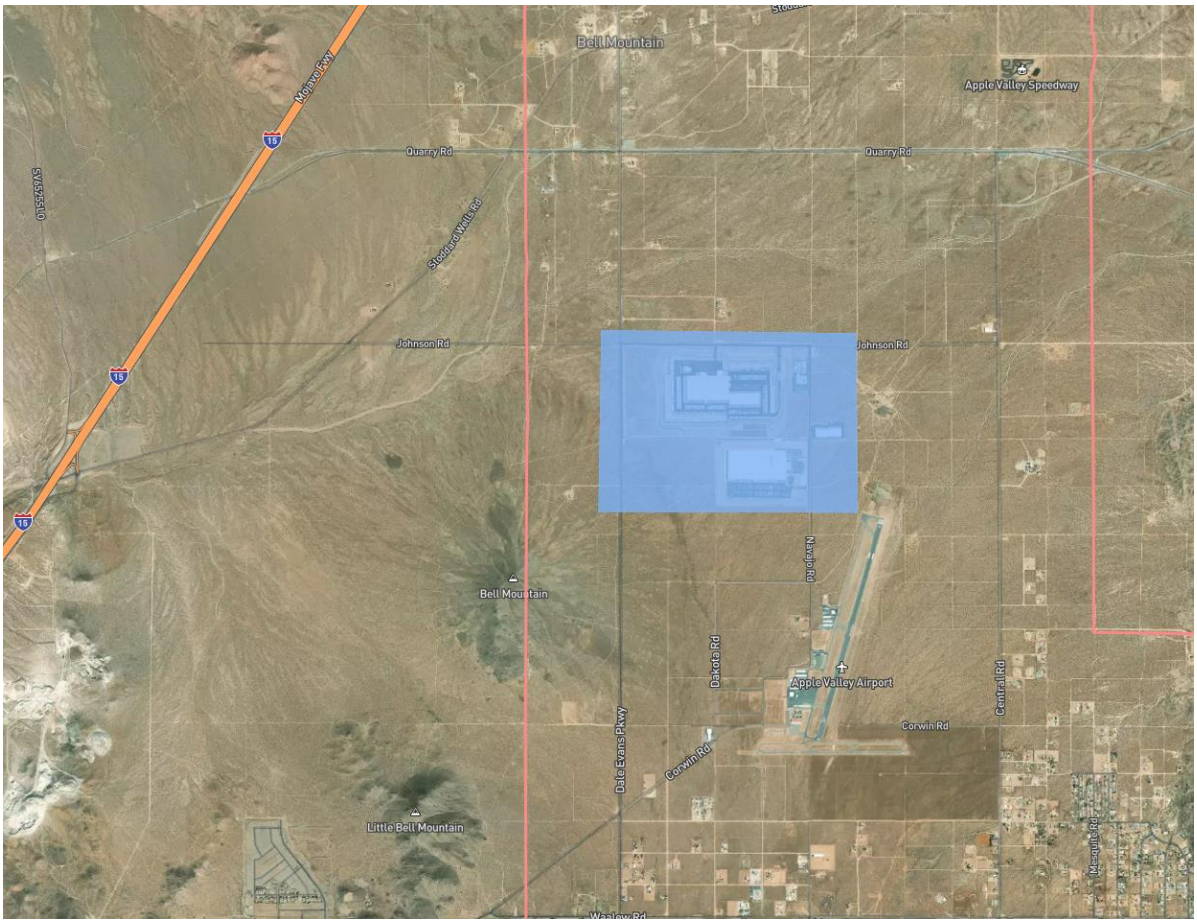
estimates over different time periods, StreetLight™ Data utilizes the Monthly Average Daily Trip (MADT) for the specific days or times needed for a given analysis.

In the scaling process, StreetLight™ factors in the ratio between sample trip counts for specific hours, days, and trip counts for the entire month, using MADT for that zone. The estimated truck volume is validated by comparing it to actual volume data obtained from permanent traffic counters, sourced from the Federal Highway Administration's (FHWA) Travel Monitoring Analysis System (TMAS) CLS dataset. This dataset includes traffic counts from over 3,000 unique sites, spanning from January 2019 through December 2021.

SURVEY AREA

Truck travel characteristics were obtained from an existing industrial area along the I-15 Freeway. This area was chosen due to its proximity to the Project, location within the Mojave Desert Air Basin (MDAB) similar to the Project and anticipated operational similarities. The data for this survey includes information on Medium Heavy-Duty Trucks (MDT) and Heavy Heavy-Duty Trucks (HDT) that either originated, ended, or passed through the surveyed area during the most recent consecutive 12-month period available from StreetLight™ Data for truck travel volume metrics. Exhibit 1 shows the surveyed location.

EXHIBIT 1: SURVEYED LOCATION



SCAB ACTIVITY

Using additional mapping data from StreetLight™ the evaluation of the truck travel patterns is shown in Exhibit 1. As shown, the existing truck travel activity ends in the City of Rancho Cucamonga area to the westerly split Interstate 15 (**Ontario Freeway**) and the City of San Bernardino to the easterly split along Interstate 215 (**Barstow freeway**).

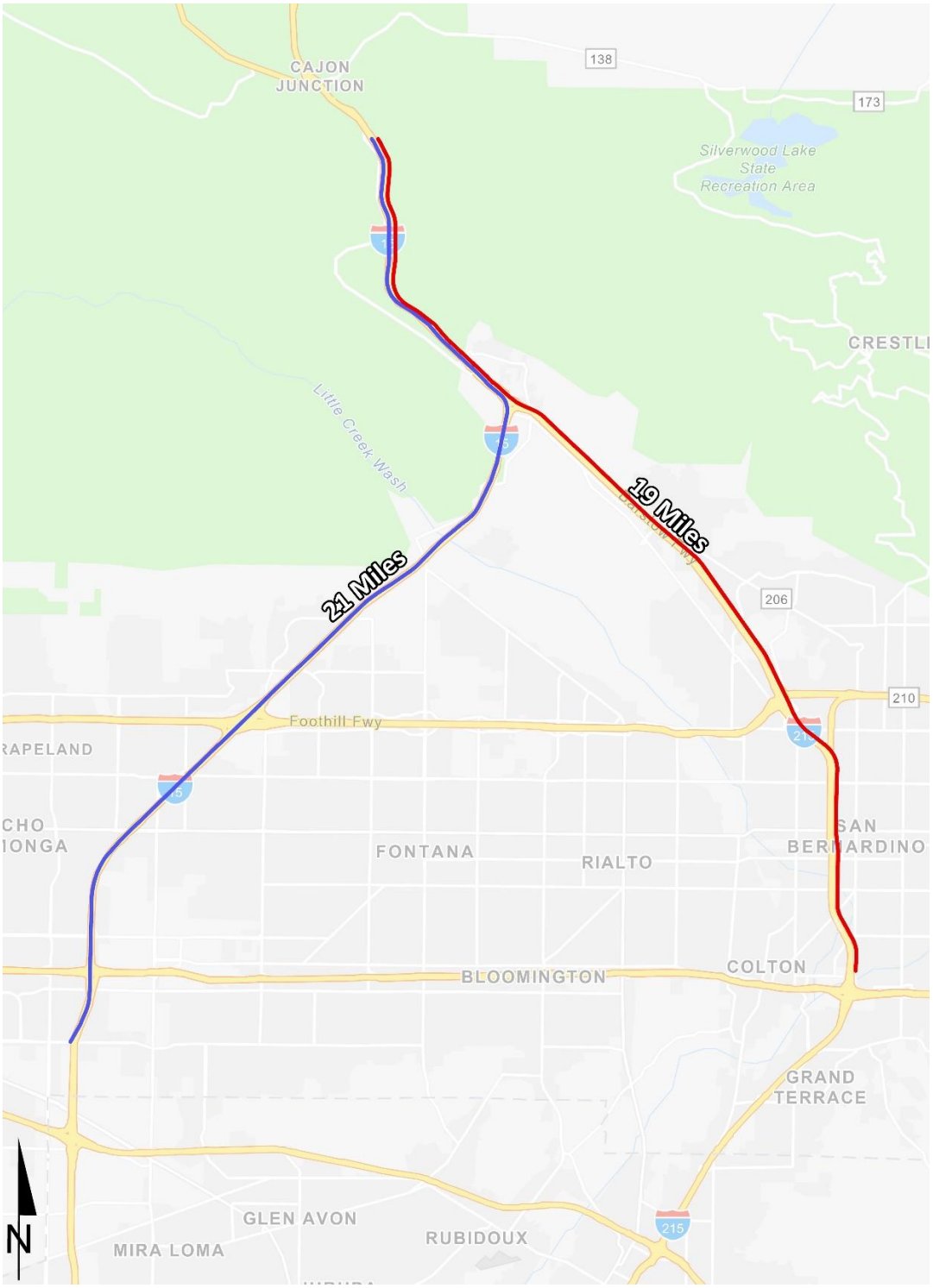
EXHIBIT 1: TRUCK ACTIVITY

Shown in Exhibit 2, the truck travel diverges in the Cajon area, as they enter the SCAB, where 23.12% of truck travel continues south-southwest along the Ontario Freeway into the City of Rancho Cucamonga and 15.51% of truck travel proceeds south-southeast along the Barstow Freeway into the City of San Bernardino.

EXHIBIT 2: TRUCK DIVERGENCE

Using the ESRI GIS mapping software, distances from the edge of the SCAB boundary to the approximate truck trip ends of the City of Rancho Cucamonga and the City of San Bernardino were measured to estimate the truck travel activity within the SCAB, shown in Exhibit 3.

EXHIBIT 3: SCAQMD TRUCK DISTNACES



As identified in Exhibit 3, the truck travel activity for projects in the vicinity of the Town of Apple Valley are expected to have truck activity within the SCAB between approximately 19-21 miles along the I-15 and I-215 corridor.

AV 143 Trucks in South Coast - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

AV 143 Trucks in South Coast

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	2,518.50	1000sqft	143.00	2,518,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2025
Utility Company	Statewide Average				
CO2 Intensity (lb/MWhr)	453.21	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Adjusted assumptions to only model trucks in South Coast associated with AV 143 project

Land Use - Warehouse uses for truck proportion

Construction Phase - Modeling ops only

Off-road Equipment - Modeling ops only

Trips and VMT - Modeling ops only

Vehicle Trips - 39% of trucks and trip length of 21 miles in South Coast based on Streetlight

Fleet Mix - Project-specific truck fleet mix

Consumer Products - Only modeling trucks

Area Coating - Only modeling trucks

Landscape Equipment - Only modeling trucks

Energy Use - Only modeling trucks

Water And Wastewater - Only modeling trucks

AV 143 Trucks in South Coast - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Solid Waste - Only modeling trucks

Architectural Coating - Modeling ops only

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	1,259,250.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	3,777,750.00	0.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	0
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.33	0.00
tblEnergyUse	T24NG	1.98	0.00
tblFleetMix	HHD	9.2160e-003	0.61
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	6.5330e-003	0.05
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.6570e-003	0.00
tblFleetMix	MHD	0.01	0.18
tblFleetMix	OBUS	8.1400e-004	0.00
tblFleetMix	SBUS	7.5300e-004	0.00
tblFleetMix	UBUS	4.9700e-004	0.00
tblLandscapeEquipment	NumberSummerDays	250	0

AV 143 Trucks in South Coast - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LotAcreage	57.82	143.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblSolidWaste	SolidWasteGenerationRate	2,367.39	0.00
tblTripsAndVMT	WorkerTripNumber	212.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	21.00
tblVehicleTrips	CNW_TTP	41.00	100.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	0.23
tblVehicleTrips	SU_TR	1.74	0.23
tblVehicleTrips	WD_TR	1.74	0.23
tblWater	IndoorWaterUseRate	582,403,125.00	0.00

2.0 Emissions Summary

AV 143 Trucks in South Coast - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

AV 143 Trucks in South Coast - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.1365	51.6912	16.2445	0.2797	10.7176	0.4043	11.1219	3.0110	0.3867	3.3977		30,330.3258	30,330.3258	1.3167	4.3330	31,654.4672
Total	**1.1601**	**51.6935**	**16.5009**	**0.2797**	**10.7176**	**0.4053**	**11.1228**	**3.0110**	**0.3876**	**3.3986**		**30,330.8770**	**30,330.8770**	**1.3181**	**4.3330**	**31,655.0543**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.1365	51.6912	16.2445	0.2797	10.7176	0.4043	11.1219	3.0110	0.3867	3.3977		30,330.3258	30,330.3258	1.3167	4.3330	31,654.4672
Total	**1.1601**	**51.6935**	**16.5009**	**0.2797**	**10.7176**	**0.4053**	**11.1228**	**3.0110**	**0.3876**	**3.3986**		**30,330.8770**	**30,330.8770**	**1.3181**	**4.3330**	**31,655.0543**

AV 143 Trucks in South Coast - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/1/2025	4/28/2025	5	220	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

AV 143 Trucks in South Coast - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

AV 143 Trucks in South Coast - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

AV 143 Trucks in South Coast - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1365	51.6912	16.2445	0.2797	10.7176	0.4043	11.1219	3.0110	0.3867	3.3977		30,330.3258	30,330.3258	1.3167	4.3330	31,654.4672
Unmitigated	1.1365	51.6912	16.2445	0.2797	10.7176	0.4043	11.1219	3.0110	0.3867	3.3977		30,330.3258	30,330.3258	1.3167	4.3330	31,654.4672

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	574.22	574.22	574.22	4,389,322	4,389,322
Total	574.22	574.22	574.22	4,389,322	4,389,322

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	0.00	0.00	21.00	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.165262	0.045632	0.183539	0.605567	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870
Unmitigated	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870

AV 143 Trucks in South Coast - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870
Total	**0.0236**	**2.3200e-003**	**0.2565**	**2.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**		**0.5512**	**0.5512**	**1.4300e-003**		**0.5870**

AV 143 Trucks in South Coast - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870
Total	**0.0236**	**2.3200e-003**	**0.2565**	**2.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**		**0.5512**	**0.5512**	**1.4300e-003**		**0.5870**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

AV 143 Trucks in South Coast - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

AV 143 Trucks in South Coast

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	2,518.50	1000sqft	143.00	2,518,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2025
Utility Company	Statewide Average				
CO2 Intensity (lb/MWhr)	453.21	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Adjusted assumptions to only model trucks in South Coast associated with AV 143 project

Land Use - Warehouse uses for truck proportion

Construction Phase - Modeling ops only

Off-road Equipment - Modeling ops only

Trips and VMT - Modeling ops only

Vehicle Trips - 39% of trucks and trip length of 21 miles in South Coast based on Streetlight

Fleet Mix - Project-specific truck fleet mix

Consumer Products - Only modeling trucks

Area Coating - Only modeling trucks

Landscape Equipment - Only modeling trucks

Energy Use - Only modeling trucks

Water And Wastewater - Only modeling trucks

AV 143 Trucks in South Coast - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Solid Waste - Only modeling trucks

Architectural Coating - Modeling ops only

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	1,259,250.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	3,777,750.00	0.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	0
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.33	0.00
tblEnergyUse	T24NG	1.98	0.00
tblFleetMix	HHD	9.2160e-003	0.61
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	6.5330e-003	0.05
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.6570e-003	0.00
tblFleetMix	MHD	0.01	0.18
tblFleetMix	OBUS	8.1400e-004	0.00
tblFleetMix	SBUS	7.5300e-004	0.00
tblFleetMix	UBUS	4.9700e-004	0.00
tblLandscapeEquipment	NumberSummerDays	250	0

AV 143 Trucks in South Coast - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LotAcreage	57.82	143.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblSolidWaste	SolidWasteGenerationRate	2,367.39	0.00
tblTripsAndVMT	WorkerTripNumber	212.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	21.00
tblVehicleTrips	CNW_TTP	41.00	100.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	0.23
tblVehicleTrips	SU_TR	1.74	0.23
tblVehicleTrips	WD_TR	1.74	0.23
tblWater	IndoorWaterUseRate	582,403,125.00	0.00

2.0 Emissions Summary

AV 143 Trucks in South Coast - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

AV 143 Trucks in South Coast - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.0912	54.1033	16.4172	0.2799	10.7176	0.4050	11.1226	3.0110	0.3873	3.3984		30,354.6777	30,354.6777	1.3137	4.3397	31,680.7363
Total	**1.1148**	**54.1056**	**16.6736**	**0.2799**	**10.7176**	**0.4059**	**11.1235**	**3.0110**	**0.3882**	**3.3993**		**30,355.2289**	**30,355.2289**	**1.3152**	**4.3397**	**31,681.3233**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.0912	54.1033	16.4172	0.2799	10.7176	0.4050	11.1226	3.0110	0.3873	3.3984		30,354.6777	30,354.6777	1.3137	4.3397	31,680.7363
Total	**1.1148**	**54.1056**	**16.6736**	**0.2799**	**10.7176**	**0.4059**	**11.1235**	**3.0110**	**0.3882**	**3.3993**		**30,355.2289**	**30,355.2289**	**1.3152**	**4.3397**	**31,681.3233**

AV 143 Trucks in South Coast - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/1/2025	4/28/2025	5	220	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

AV 143 Trucks in South Coast - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

AV 143 Trucks in South Coast - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

AV 143 Trucks in South Coast - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0912	54.1033	16.4172	0.2799	10.7176	0.4050	11.1226	3.0110	0.3873	3.3984		30,354.6777	30,354.6777	1.3137	4.3397	31,680.7363
Unmitigated	1.0912	54.1033	16.4172	0.2799	10.7176	0.4050	11.1226	3.0110	0.3873	3.3984		30,354.6777	30,354.6777	1.3137	4.3397	31,680.7363

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	574.22	574.22	574.22	4,389,322	4,389,322
Total	574.22	574.22	574.22	4,389,322	4,389,322

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	0.00	0.00	21.00	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.165262	0.045632	0.183539	0.605567	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870
Unmitigated	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870

AV 143 Trucks in South Coast - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870
Total	**0.0236**	**2.3200e-003**	**0.2565**	**2.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**		**0.5512**	**0.5512**	**1.4300e-003**		**0.5870**

AV 143 Trucks in South Coast - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0236	2.3200e-003	0.2565	2.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004		0.5512	0.5512	1.4300e-003		0.5870
Total	**0.0236**	**2.3200e-003**	**0.2565**	**2.0000e-005**		**9.1000e-004**	**9.1000e-004**		**9.1000e-004**	**9.1000e-004**		**0.5512**	**0.5512**	**1.4300e-003**		**0.5870**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix C
Truck Turning Template

PROJECT DATA

	BUILDING 1		BUILDING 2		BUILDING 3		TOTAL	
SITE AREA	1,355,411	SF	3,123,845	SF	1,624,678	SF	6,103,934	SF
	31.12	AC	71.71	AC	37.30	AC	140.13	AC
BUILDING AREA								
FOOTPRINT	615,000	SF	1,221,000	SF	682,500	SF	2,518,500	SF
MEZZANINE	0	SF	0	SF	0	SF	0	SF
TOTAL	615,000	SF	1,221,000	SF	682,500	SF	2,518,500	SF
FLOOR AREA BY USE								
OFFICE	15,000	SF	30,000	SF	20,000	SF	65,000	SF
WAREHOUSE	600,000	SF	1,191,000	SF	662,500	SF	2,453,500	SF
TOTAL	615,000	SF	1,222,500	SF	682,500	SF	2,520,000	SF
COVERAGE	45.37%		39.09%		42.01%		41.26%	
F.A.R.	0.454		0.391		0.420		0.413	
PARKING REQUIRED								
OFFICE (N.A. < 25%)	0		0		0		0	
WAREHOUSE @ 1/500 1st 10k SF	20		20		20		60	
WAREHOUSE @ 1/1000 > 10k SF	605		1,213		673		2,490	
TOTAL	625		1,233		693		2,550	
PARKING PROVIDED								
STANDARD STALLS	297		652		371		1,320	
ADA STALLS	5		5		2		12	
TOTAL	302		657		373		1,332	
LANDSCAPE AREA	193,000	SF	566,000	SF	162,500	SF	921,500	SF
LANDSCAPE %	14.24%		18.12%		10.00%		15.10%	
DOCK LOADING SPACES REQUIRED	31		61		34		126	
DOCK LOADING SPACES PROVIDED	130		239		112		481	
TRAILER PARKING PROVIDED	144		417		198		759	

PROJECT INFORMATION:

APN: 0472-211-05-0000
0472-211-06-0000
0472-211-15-0000
0472-222-06-0000
0472-222-11-0000

ZONE: C-R

USE: WAREHOUSE (S-1)

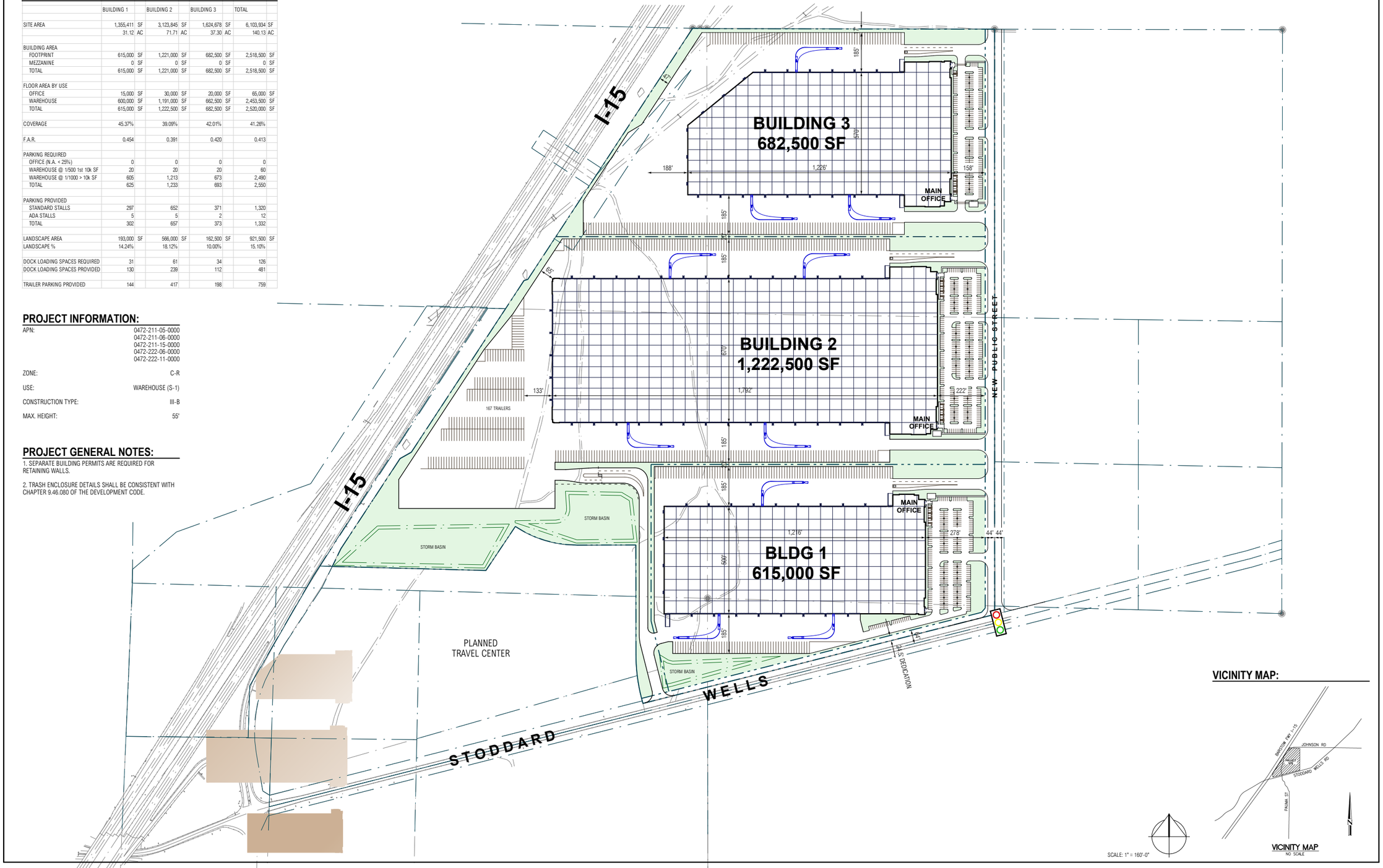
CONSTRUCTION TYPE: III-B

MAX. HEIGHT: 55'

PROJECT GENERAL NOTES:

1. SEPARATE BUILDING PERMITS ARE REQUIRED FOR RETAINING WALLS.

2. TRASH ENCLOSURE DETAILS SHALL BE CONSISTENT WITH CHAPTER 9.46.080 OF THE DEVELOPMENT CODE.



VICINITY MAP:

VICINITY MAP
NO SCALE

SCALE: 1" = 160'-0"

PREPARED BY:

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TEL:760-672-3040

BELL MOUNTAIN COMMERCE CENTER

APPLE VALLEY, CA

SCHEMATIC OVERALL SITE PLAN

MARK	DATE	DESCRIPTION
	3/2/23	2ND PLANNING SUBMITTAL
	6/2/22	PRELIMINARY SITE PLAN

RGA PROJECT NO:	21157.00
CAD FILE NAME:	21157-00-A1-03.2
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