LAND USE SERVICES DEPARTMENT
PLANNING COMMISSION STAFF REPORT

HEARING DATE: May 18, 2023 **AGENDA ITEM #3**

Project Description

APN: 0230-131-01
Applicant: Lord Constructors

Community: Fontana / 2ND Supervisorial District
Location: Southeast corner of Arrow Route and Almond Avenue, in the Fontana area.
Project No: PROJ-2022-00147
Staff: Jim Morrissey
Rep: Gregg Lord
Proposal: Policy Plan Amendment from Medium Density Residential (MDR) to Limited Industrial (LI); Zoning Amendment from Multiple Residential (RM) to Community Industrial (IC); and Conditional Use Permit for a 39,500 square-foot warehouse building all on approximately 2.1 acres.

Vicinity Map -

Hearing Notices Sent on : May 4, 2023

Report Prepared By: Jim Morrissey, Contract Planner

SITE INFORMATION:
Parcel Size: 2.1 acres
Terrain: Flat
Vegetation: Minimal vegetation, due to an existing residence and trailer truck storage.

TABLE 1 – SITE AND SURROUNDING LAND USES AND ZONING:

AREA	EXISTING LAND USE	POLICY PLAN CATEGORY	ZONING DISTRICT
SITE	Single Family	Medium Density Residential (MDR)	Multiple Residential (RM)
North	Vehicle storage	Medium Density Residential (MDR)	Multiple Residential (RM)
South	Warehouse	Limited Industrial (LI)	Community Industrial (IC)
East	Multiple Family	Medium Density Residential (MDR)	Multiple Residential (RM)
West	Vacant	Medium Density Residential (MDR)	Multiple Residential (RM)

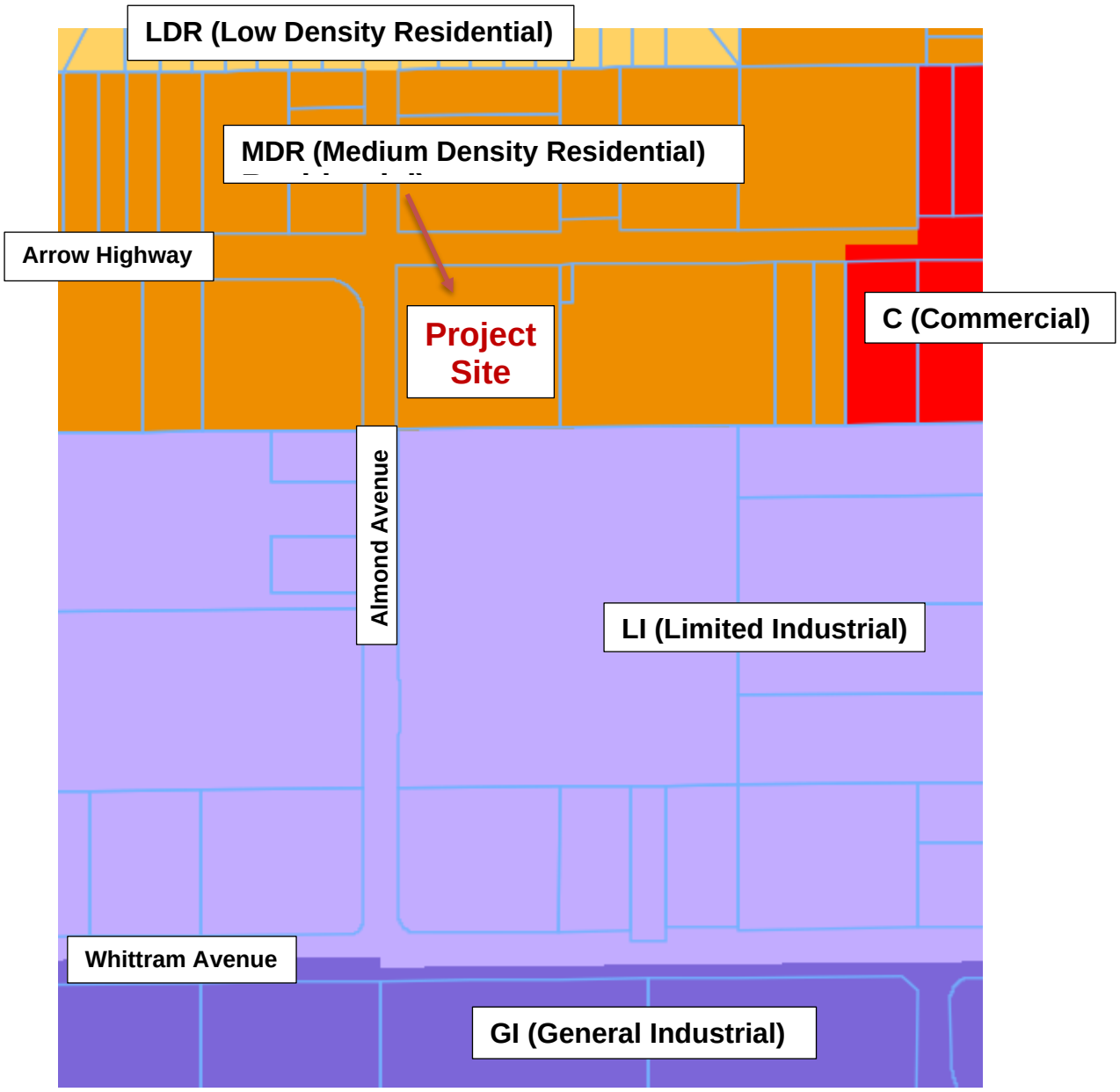
	Agency	Comment
City Sphere of Influence:	Fontana	No Comments
Water Service:	San Gabriel Water Company	Will Serve
Sewer Service:	Environmental Health Services	Septic System

STAFF RECOMMENDATION: The Planning Commission recommend to the Board of Supervisors to **ADOPT** the Mitigated Negative Declaration, **ADOPT** the Findings as contained in the staff report, **ADOPT** the Policy Plan Amendment, **ADOPT** the Zoning Amendment, **APPROVE** the Conditional Use Permit, subject to the Conditions of Approval, and **DIRECT** the Clerk of the Board of Supervisors to file a Notice of Determination. [1]

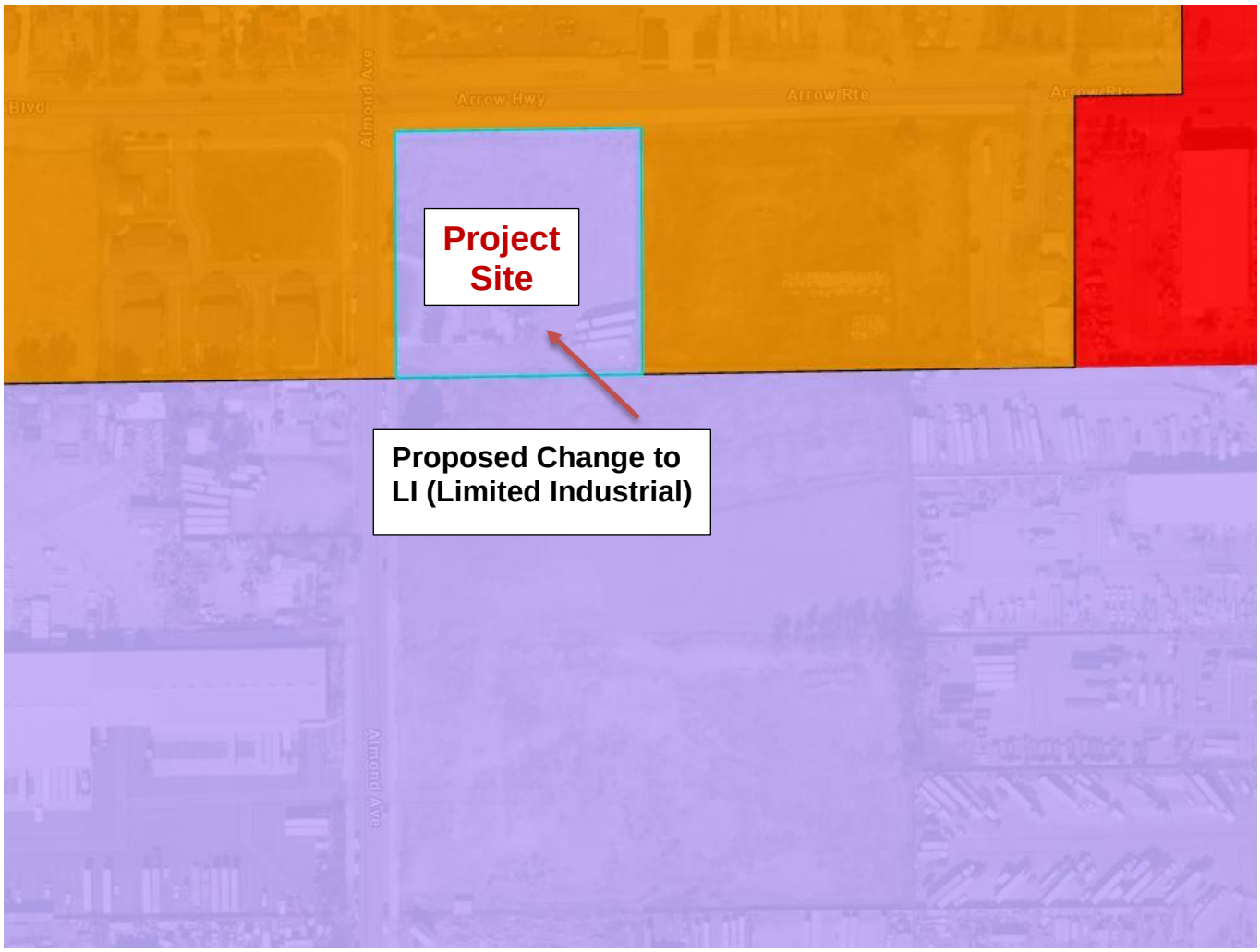
1. This is a recommendation item. A disapproval recommendation by the Planning Commission shall terminate the application unless appealed in compliance with Chapter 86.08.

VICINITY MAP:
Aerial view of the Project Site

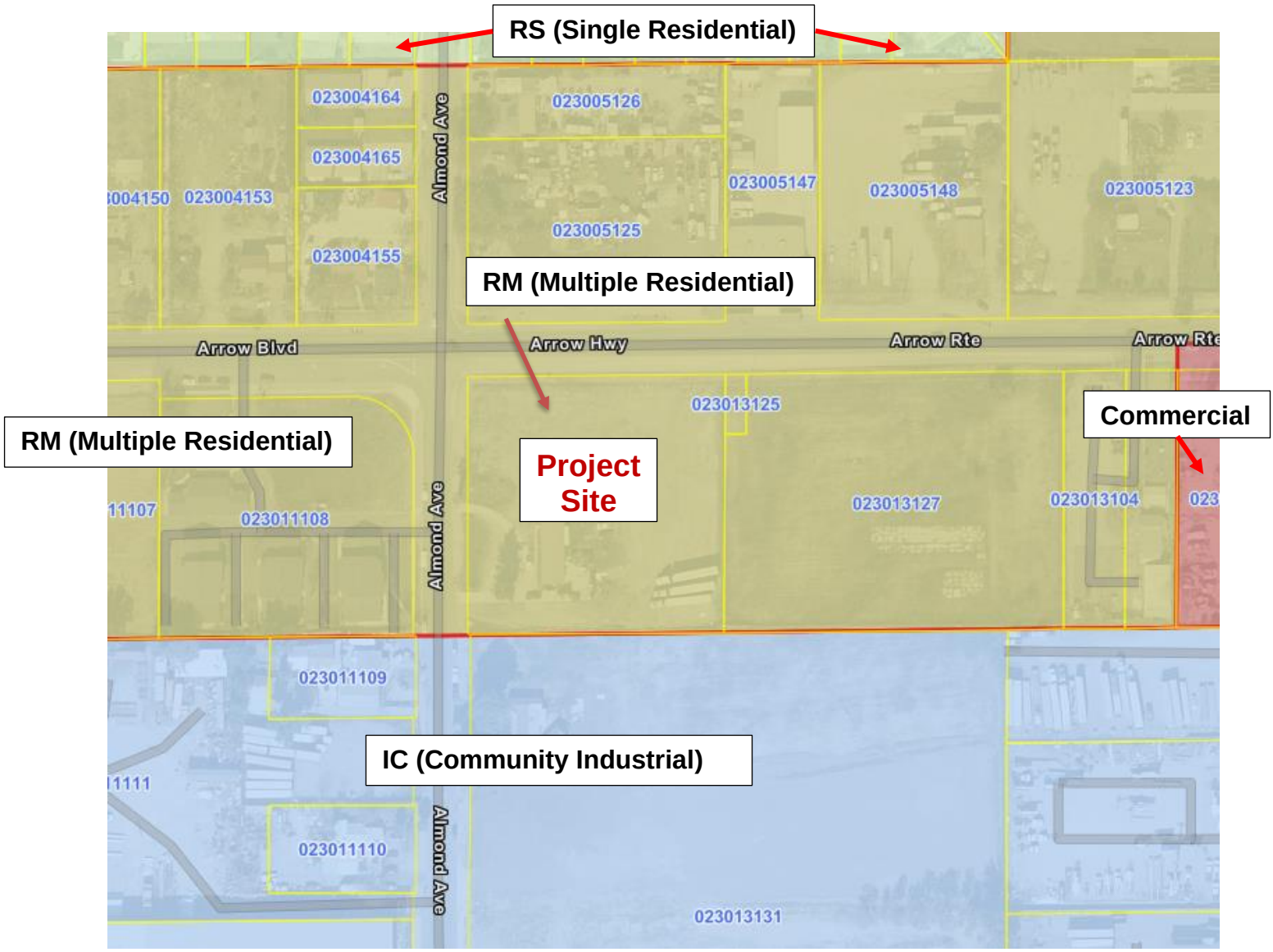
EXISTING POLICY PLAN LAND USE MAP:
MDR (Medium Density Residential)



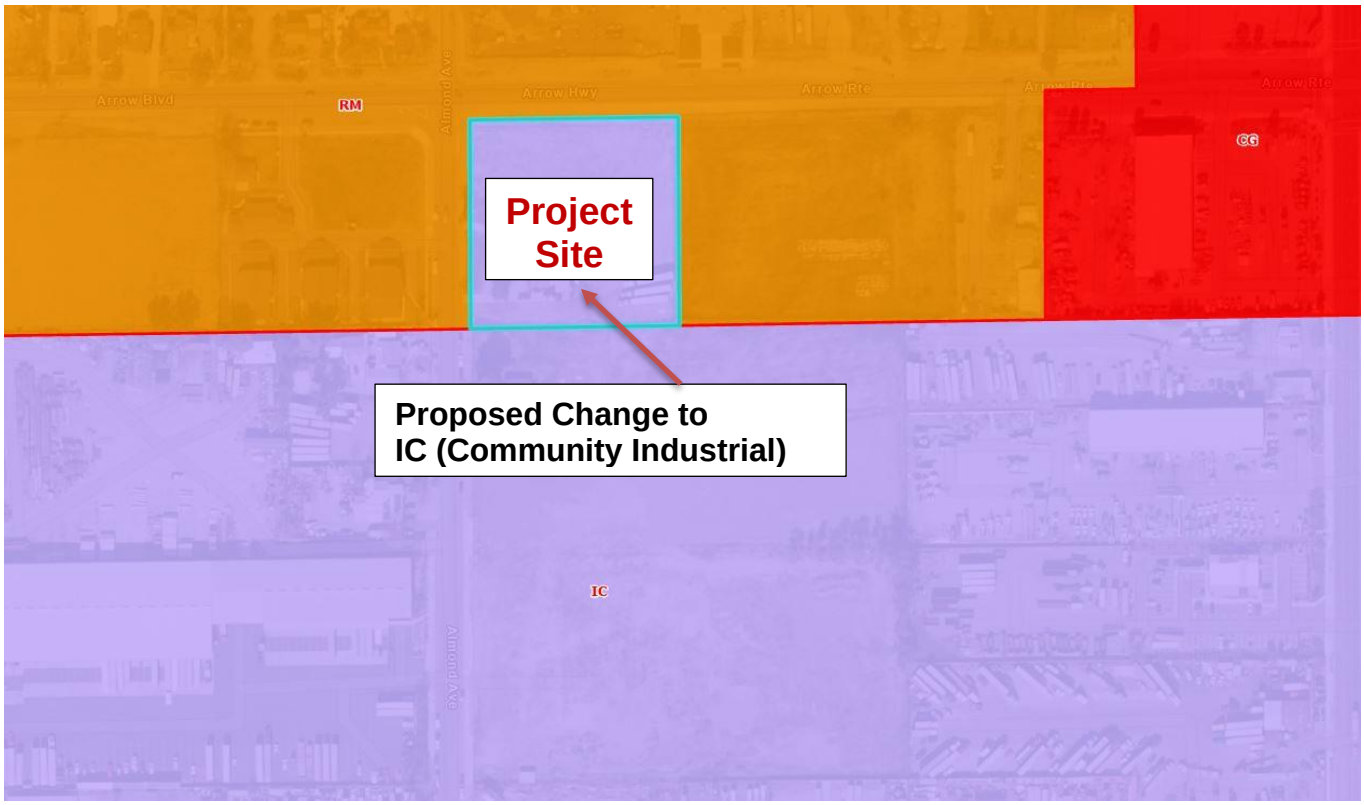
PROPOSED POLICY PLAN LAND USE MAP:
LI (Limited Industrial)



EXISTING ZONING MAP:
RM (Multiple Residential)



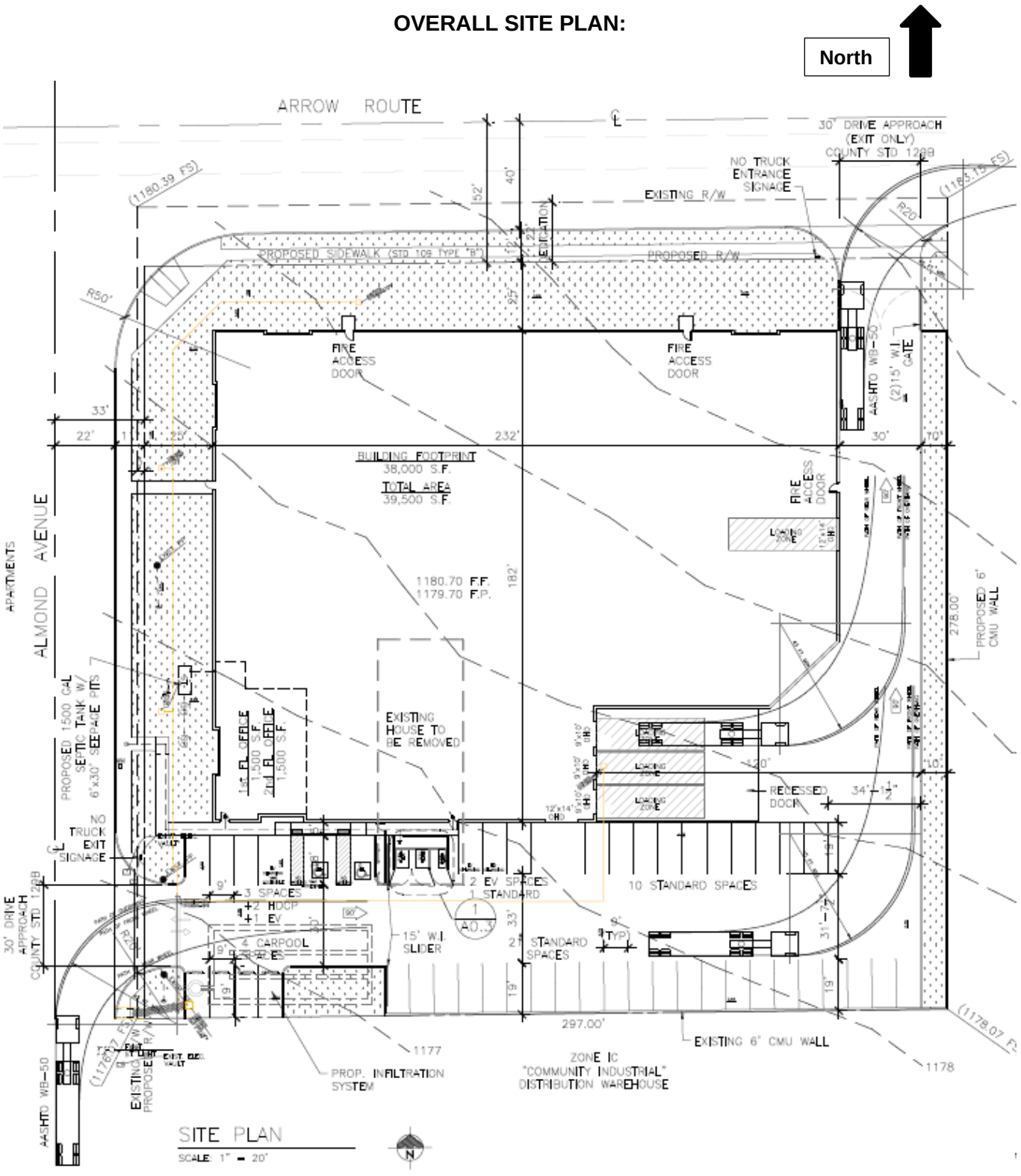
PROPOSED ZONING MAP:
IC (Community Industrial)



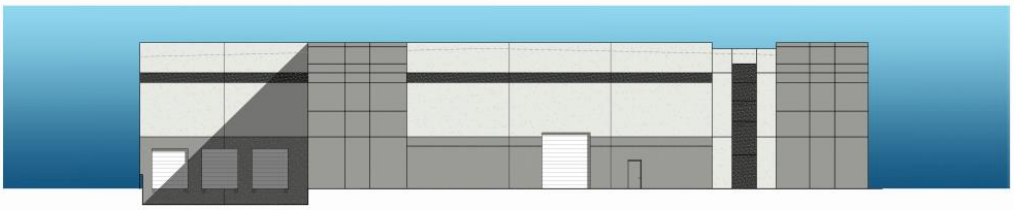
AERIAL MAP:


023004155
Almond Ave
023005125
Arrow Blvd
Arrow Hwy
Arrow Rte
Project Site
023013125
Almond Ave
023013101
1108
Almond Ave
023011109

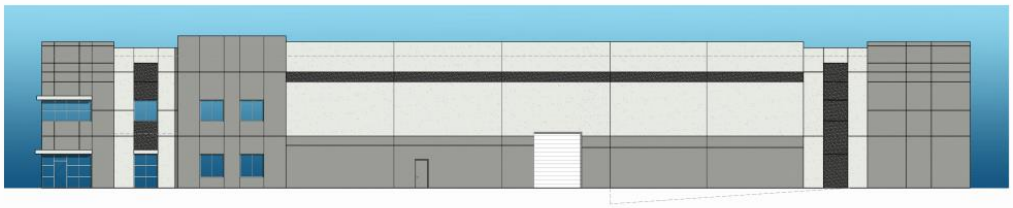
OVERALL SITE PLAN:



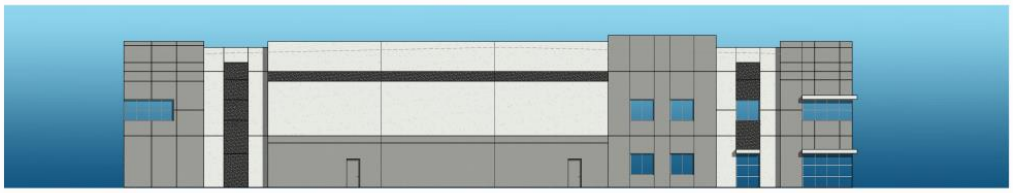
BUILDING ELEVATIONS



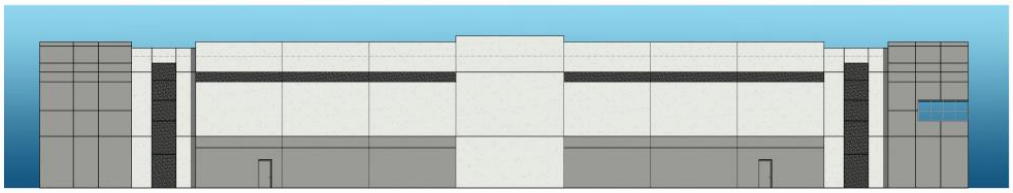
East Elevation



South Elevation



West Elevation



North Elevation

SITE PHOTOS

View looking east (left) and west (right) from the intersection of Almond Avenue and Arrow Route.

View southeasterly (left) and southwesterly (right) from Almond Avenue and Arrow Route.

Views across the property from Almond Avenue and Arrow Route.

PROJECT DESCRIPTION:

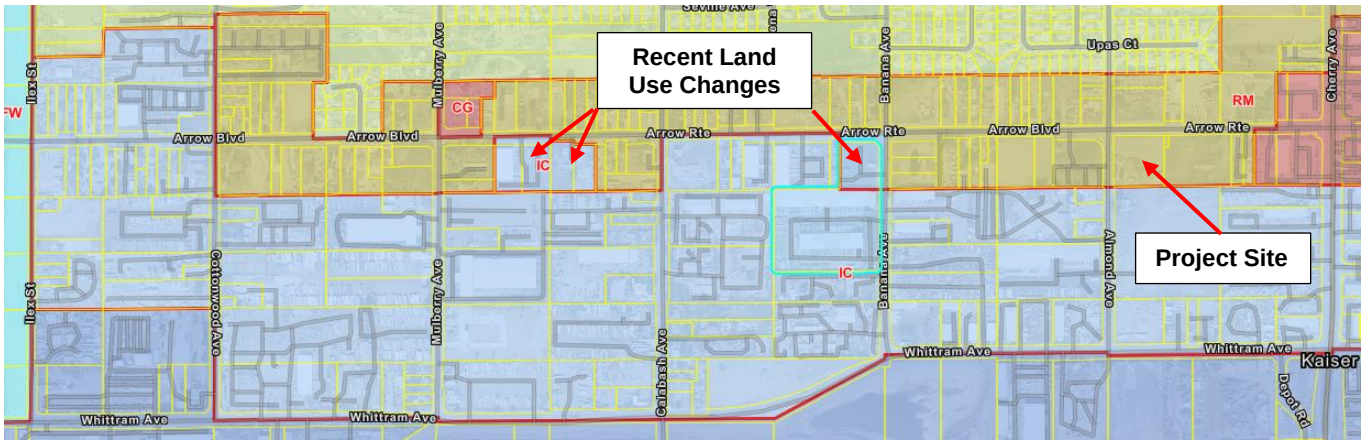
Lord Constructors (Applicant) is requesting approval of a Policy Plan Amendment to amend the Land Use Category designation from Medium Density Residential (MDR) to Limited Industrial (LI); a Zoning Amendment to amend the Land Use Zoning District from Multiple Residential (RM) to Community Industrial (IC); and a Conditional Use Permit for a 39,500 square-foot warehouse building on a 2.1-acre site (Project). The Project is located on the southeast corner of Arrow Route and Almond Avenue in the unincorporated Fontana area

The proposed Policy Plan and Zoning Amendment are intended to reflect the existing land use and zoning for properties to the south and represents a logical extension of existing zoning and the transition of property uses south of Arrow Route. An existing 185,866 square foot warehouse is located on the adjoining property to the south.

Land Uses Along Arrow Route

Arrow Route has been transitioning from residential to industrial uses over the years. For example, recent amendments from residential to industrial were approved for a property west of Calabash Avenue, just over 0.5 miles to the west of the subject property as depicted in Figure 1 below on May 23, 2017 and June 22, 2021. In addition, the entire frontage along Arrow Route, between Calabash Avenue and Banana Avenue, is designated Limited Industrial (LI) on the Countywide Plan, approximately 0.25 miles to the west of the site. One of the parcels in that parcel group included a Policy Plan Amendment from residential to industrial, as part of the adoption of the Countywide Plan in 2020, and further depicted in Figure 1 below.

Figure 1



PROJECT ANALYSIS:

Site Planning: The proposed Project will utilize roadway access from both adjoining paved roadways. The County's Department of Public Works, Traffic Division, has required ingress only onto the southerly portion of the property from Almond Avenue and egress only from the easterly portion of the property onto Arrow Route. The adjoining land use to the south is Limited Industrial (LI) and to the east is Medium Density Residential (MDR). The applicant has proposed landscaping and a six-foot-high block wall along the easterly property line, consistent with the requirements of the Development Code. This same requirement is reflected in the existing design along the southerly property line, with an existing six-foot-high block wall, due to the previous construction of the adjoining warehouse and will provide a buffer between the Project and residential uses to the east.

Code Compliance Summary: The Project satisfies all applicable standards of the Development Code for development in the IC Zoning District, as illustrated in Table 2 below.

Table 2: PROJECT CODE COMPLIANCE

Project Component	Development Code Community Industrial		Project Plans (Proposed)
Warehouse and Assembly	CUP		CUP
Parking	• One space for each 250 sq. ft. of office area, with four spaces minimum. • One space for each 1,000 sq. ft. for industrial related uses of 40,000 sq. ft. or less. • One loading space for each 5,000 sq. ft., not more than four spaces.		• 48 spaces total • 3,000 square feet of office = 12 parking spaces. • Warehouse = 36 spaces. • Handicapped parking = 2 spaces, incorporated with the total number. • Loading spaces = Four spaces.
Building Setbacks	Front Street Side Interior Side Rear	25’ 25’ 10’/0’ 10’	25’ 25’ 70’ (south side) 40’ (east side)
Building Height	75’ feet maximum		36’ 6”
Lot Coverage	85 percent		Approximately 83 percent
Floor Area Ratio	0.5:1		0.46:1
Landscaping	15 percent		Approximately 17 percent
Drive Aisles	24’		30’

CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE:

An Initial Study/Mitigated Negative Declaration (IS/MND) has been completed (Exhibit A) in compliance with the California Environmental Quality Act (CEQA). The following technical studies were completed for the proposed Project:

- Air Quality and Greenhouse Gas Analysis
- Noise and Vibration Analysis
- Historic Resources Evaluation
- Traffic Memorandum
- Soils Infiltration Testing for WQMP-BMP Stormwater Disposal System Design

A Notice of Availability/Notice of Intent (NOA/NOI) to adopt the IS/MND was advertised on the County Environmental website and distributed to initiate a 30-day public comment period, which concluded on April 10, 2023. The IS/MND concluded that the Project will not have a significant adverse impact on the environment with the implementation of recommended mitigation measures. The mitigation measures have been incorporated into the Conditions of Approval (Exhibit B). The Applicant will be responsible for implementing all mitigation measures contained in the Mitigation Monitoring and Reporting Program (MMRP) (Exhibit C). The following mitigation measures were identified for the following topic areas:

- Biological Resources: Complete a nesting bird survey.
- Cultural Resources: Archaeological monitoring of the site during ground disturbance and compliance with Health and Safety Code requirements in the event human remains are found.

- Geological/Geotechnical Recommendations: Compliance with applicable Building Code and geotechnical recommendations and retention of a certified paleontologist, if any fossil specimens are uncovered.
- Phase I ESA: Completion of a Phase I Environmental Site Assessment of the property.
- Stormwater/Hydrology: Obtain stormwater coverage under the National Pollutant Discharge Elimination System, submission of a Notice of Intent, and approval of a Final WQMP.

Public Comments:

Staff received a response to the NOA/NOI from the law firm of Lozeau Drury, LLP on April 10, 2023, in which they expressed concerns about the Project having a significant impact upon Air Quality, Human Health, and Greenhouse Gas Emissions (GHG).

In general, a summary of the concerns raised in the comment letter include the following:

- The analysis has inaccurate Air Modeling.
- The Project involves a significant health risk.
- The proposal inadequately addresses cumulative air quality impacts.
- There is a fair argument that the Project will have a significant impact due to GHG.
- The proposed Mitigated Negative Declaration should be withdrawn and an Environmental Impact Report (EIR) prepared.

A response to comments was prepared that concludes the comments raised by Lozeau Drury do not constitute substantial evidence to support a fair argument that the Project may have a significant effect on the environment. A summary of the responses to comments includes the following:

- The duration of the construction period identified in the CalEEMod program was noted as modified in the Initial Study to occur 45-days later and better reflect the potential construction time frame, yet still provided the same construction duration. This change was deemed inconsequential.
- Air Quality modeling was undertaken consistent with the CalEEMod program developed by South Coast Air Quality Management District's (SCAQMD). Adjustments to the program were undertaken to reflect the proposed Project, which is consistent with the design and use of the CalEEMod program.
- The air quality evaluation utilized appropriate modeling and found threshold levels were not exceeded.
- Health risks were properly evaluated utilizing accepted modeling, including the use of the Localized Significance Thresholds, and were found to be below established threshold levels.
- The evaluation of cumulative air quality impacts used in the proposed Mitigated Negative Declaration was based upon the South Coast Air Quality Management District's (SCAQMD) thresholds of significance for individual projects, which was not exceeded.
- GHG emissions do not exceed the SCAQMD recommended threshold of 3,000 metric tons per year.

The comment letter and responses are attached as Exhibit D. Based on the responses to comments the MND remains appropriate and the MND is not required to be recirculated. As such, an EIR is not required. Therefore, based upon the Initial Study/draft MND and responses to comments, Staff is recommending the adoption of the Mitigated Negative Declaration.

Tribal Consultation AB 52/SB 18:

Letters were distributed to Native American Tribes as part of the requirements of SB 18 and AB 52. The SB 18 letters were sent on November 30, 2022, and the AB 52 notices on January 2, 2023, which included the San Manuel Band of Mission Indians, Morongo Band of Mission Indians, Gabrieleno Band of Mission Indians – Kizh Nation, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Soboba Band of Mission Indians, Agua Caliente Band of Cahuilla Indians, Fort Yuma Quechan Indian Tribe, and Serrano Nation

of Mission Indians. The Notices requested input on the proposed Project, consistent with the requirements of AB 52 and SB 18. Comments were received from the San Manuel Band of Mission Indians on September 20, 2022, and incorporated into the IS/MND and proposed Conditions of Approval.

Environmental Justice Compliance:

The Project site is located within one of the County's designated Environmental Justice Focus Areas. The Policy Plan requires projects within these areas to hold meetings with residents, property owners, and businesses to discuss their proposals if they are changing the zoning or Policy Plan (General Plan) category. The applicant sent out notifications for two meetings to be held on February 1 and 22, 2023. Information was provided by the applicant along with photo evidence of the event. No members of the public attended the meetings, nor was any correspondence received.

RECOMMENDATION:

That the Planning Commission recommend to the Board of Supervisors to:

1. **ADOPT** the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program (Exhibits A and C);

2. **ADOPT** the recommended Findings for approval of the Project (Exhibit E);

3. **ADOPT** the Policy Plan Amendment from Medium Density Residential (MDR) to Limited Industrial (LI) for a single parcel totaling 2.1 acres;

4. **ADOPT** the Zoning Amendment from Multiple Residential (RM) to Community Industrial (CI) for a single parcel totaling 2.1 acres;

5. **APPROVE** Conditional Use Permit to construct and operate a 39,500 square-foot warehouse/assembly building on 2.1 acres, subject to the Conditions of Approval (Exhibit B); and

6. **DIRECT** the Clerk of the Board of Supervisors to post and file the Notice of Determination (Exhibit F).

ATTACHMENTS:

EXHIBIT A: Initial Study/Mitigated Negative Declaration
http://www.sbcounty.gov/uploads/LUS/Valley/Stewart%20Almond%20Warehouse/Draft%20ISMND.pdf
EXHIBIT B: Conditions of Approval
EXHIBIT C: Mitigation Monitoring and Reporting Program
EXHIBIT D: Comments/Responses to Comments
EXHIBIT E: Findings
EXHIBIT F: Notice of Determination
EXHIBIT G: Building Renderings

EXHIBIT A

Initial Study/Mitigated Negative Declaration

http://www.sbcounty.gov/uploads/LUS/Valley/Stewart%20Almond%20Warehouse/Draft%20ISMND.pdf

EXHIBIT B

Conditions of Approval

Conditions of Approval

Record:	PROJ-2022-00147	**System Date:**	05/03/2023
Record Type:	Project Application	**Primary APN:**	0230131010000
Record Status:	In Review	**Application Name:**	CF- CUP / ZA
Effective Date:		**Expiration Date:**	

Description: A CONDITIONAL USE PERMIT, CHANGE OF ZONE FROM RM (MULTIPLE RESIDENTIAL) TO IC (COMMUNITY INDUSTRIAL), AND POLICY PLAN AMENDMENT FROM MDR (MEDIUM DENSITY RESIDENTIAL) TO LI (LIMITED INDUSTRIAL) TO CONSTRUCT A 40,000 SQ. FT. TILT-UP BUILDING WITH 36,000 SQ. FT. ON THE FIRST FLOOR, COMPRISED OF 2,000 SQ. FT. OF OFFICE, 18,000 SQ. FT. OF OPEN ASSEMBLY AREA, AND 18,000 SQ. FT. OF WAREHOUSE, AND A SECOND FLOOR WITH 2,000 SQ. FT. OF OFFICE SPACE ON 2.05 ACRES; RM (MULTIPLE RESIDENTIAL); APN: 0230-131-01; 2ND SUPERVISORIAL DISTRICT; PROJECT NUMBER: PROJ-2022-00147.

This document does not signify project approval.

If the project has been approved, then an effective date and an expiration date for these conditions can be found below. This content reflects County records as at the System Date and time below.

The following conditions of approval have been imposed for the project identified below. The applicant/developer shall complete all conditions of approval stipulated in the approval letter.

Conditions of Approval are organized by project phase, then by status, and finally by department imposing the condition.

On-going conditions must be complied with at all times. For assistance interpreting the content of this document, please contact the Land Use Services Department Planning Division.

Contact information is provided at the end of this document for follow-up on individual conditions.

ON-GOING

Land Use Services - Planning

1 **Project Approval Description (CUP/MUP)** - Status: Outstanding
This Conditional Use Permit is conditionally approved to construct a 39,500 square foot warehouse building with 18,250 sq. ft of assembly area and 18,250 sq. ft. of warehouse area, and 1,500 sq. ft. of office area on the first floor and 1,500 sq. ft. of office on the second floor on one parcel approximately 2.05 acres in size, in compliance with the San Bernardino County Code (SBCC), California Building Codes (CBC), the San Bernardino County Fire Code (SBCFC), the following Conditions of Approval, the approved site plan, and all other required and approved reports and displays (e.g. elevations). The developer shall provide a copy of the approved conditions and the approved site plan to every current and future project tenant, lessee, and property owner to facilitate compliance with these Conditions of Approval and continous use requirements for the Project.

2 **Revisions** - Status: Outstanding
Any proposed change to the approved Project and/or conditions of approval shall require that an additional land use application (e.g. Revision to an Approved Action) be submitted to County Land Use Services for review and approval.

3 **Indemnification** - Status: Outstanding
In compliance with SBCC §81.01.070, the developer shall agree, to defend, indemnify, and hold harmless the County or its "indemnitees" (herein collectively the County's elected officials, appointed officials (including Planning Commissioners), Zoning Administrator, agents, officers, employees, volunteers, advisory agencies or committees, appeal boards or legislative body) from any claim, action, or proceeding against the County or its indemnitees to attack, set aside, void, or annul an approval of the County by an indemnitee concerning a map or permit or any other action relating to or arising out of County approval, including the acts, errors or omissions of any person and for any costs or expenses incurred by the indemnitees on account of any claim, except where such indemnification is prohibited by law. In the alternative, the developer may agree to relinquish such approval. Any condition of approval imposed in compliance with the County Development Code or County General Plan shall include a requirement that the County acts reasonably to promptly notify the developer of any claim, action, or proceeding and that the County cooperates fully in the defense. The developer shall reimburse the County and its indemnitees for all expenses resulting from such actions, including any court costs and attorney fees, which the County or its indemnitees may be required by a court to pay as a result of such action. The County may, at its sole discretion, participate at its own expense in the defense of any such action, but such participation shall not relieve the developer of their obligations under this condition to reimburse the County or its indemnitees for all such expenses. This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. The developer's indemnification obligation applies to the indemnitees' "passive" negligence but does not apply to the indemnitees' "sole" or "active" negligence or "willful misconduct" within the meaning of Civil Code Section 2782.

4 **Additional Permits** - Status: Outstanding
The developer shall ascertain compliance with all laws, ordinances, regulations and any other requirements of Federal, State, County and Local agencies that may apply for the development and operation of the approved land use. These may include but are not limited to: a. FEDERAL: b. STATE: c. COUNTY: d. LOCAL:

5 **Expiration** - Status: Outstanding
This project permit approval shall expire and become void if it is not "exercised" within 36 months of the effective date of this approval, unless an extension of time is approved. The permit is deemed "exercised" when either: (a.) The permittee has commenced actual construction or alteration under a validly issued building permit, or (b.) The permittee has substantially commenced the approved land use or activity on the project site, for those portions of the project not requiring a building permit. (SBCC §86.06.060) (c.) Occupancy of approved land use, occupancy of completed structures and operation of the approved and exercised land use remains valid continuously for the life of the project and the approval runs with the land, unless one of the following occurs: - Construction permits for all or part of the project are not issued or the construction permits expire before the structure is completed and the final inspection is approved. - The land use is determined by the County to be abandoned or non-conforming. - The land use is determined by the County to be not operating in compliance with these conditions of approval, the County Code, or other applicable laws, ordinances or regulations. In these cases, the land use may be subject to a revocation hearing and possible termination. PLEASE NOTE: This will be the ONLY notice given of this approval's expiration date. The developer is responsible to initiate any Extension of Time application.

6 **Continous Effect/Revocation** - Status: Outstanding
All of the conditions of this project approval are continuously in effect throughout the operative life of the project for all approved structures and approved land uses/activities. Failure of the property owner or developer to comply with any or all of the conditions at any time may result in a public hearing and possible revocation of the approved land use, provided adequate notice, time and opportunity is provided to the property owner, developer or other interested party to correct the non-complying situation.

7 **Extension of Time** - Status: Outstanding
Extensions of time to the expiration date (listed above or as otherwise extended) may be granted in increments each not to exceed an additional three years beyond the current expiration date. An application to request consideration of an extension of time may be filed with the appropriate fees no less than thirty days before the expiration date. Extensions of time may be granted based on a review of the application, which includes a justification of the delay in construction and a plan of action for completion. The granting of such an extension request is a discretionary action that may be subject to additional or revised conditions of approval or site plan modifications. (SBCC §86.06.060)

8 **Project Account** - Status: Outstanding
The Project account number is PROJ-2022-00147. This is an actual cost project with a deposit account to which hourly charges are assessed by various county agency staff (e.g. Land Use Services, Public Works, and County Counsel). Upon notice, the "developer" shall deposit additional funds to maintain or return the account to a positive balance. The "developer" is responsible for all expense charged to this account. Processing of the project shall cease, if it is determined that the account has a negative balance and that an additional deposit has not been made in a timely manner. A minimum balance of $2,000.00 must be in the project account at the time the Condition Compliance Review is initiated. Sufficient funds must remain in the account to cover the charges during each compliance review. All fees required for processing shall be paid in full prior to final inspection, occupancy and operation of the approved use.

9 **Development Impact Fees** - Status: Outstanding
Additional fees may be required prior to issuance of development permits. Fees shall be paid as specified in adopted fee ordinances

10 **Performance Standards** - Status: Outstanding
The approved land uses shall operate in compliance with the general performance standards listed in the County Development Code Chapter 83.01, regarding air quality, electrical disturbance, fire hazards (storage of flammable or other hazardous materials), heat, noise, vibration, and the disposal of liquid waste

11 **Continous Maintenance** - Status: Outstanding
The Project property owner shall continually maintain the property so that it is visually attractive and not dangerous to the health, safety and general welfare of both on-site users (e.g. employees) and surrounding properties. The property owner shall ensure that all facets of the development are regularly inspected, maintained and that any defects are timely repaired. Among the elements to be maintained, include but are not limited to: a) Annual maintenance and repair: The developer shall conduct inspections for any structures, fencing/walls, driveways, and signs to assure proper structural, electrical, and mechanical safety. b) Graffiti and debris: The developer shall remove graffiti and debris immediately through weekly maintenance. c) Landscaping: The developer shall maintain landscaping in a continual healthy thriving manner at proper height for required screening. Drought-resistant, fire retardant vegetation shall be used where practicable. Where landscaped areas are irrigated it shall be done in a manner designed to conserve water, minimizing aerial spraying. d) Dust control: The developer shall maintain dust control measures on any undeveloped areas where landscaping has not been provided. e) Erosion control: The developer shall maintain erosion control measures to reduce water runoff, siltation, and promote slope stability. f) External Storage: The developer shall maintain external storage, loading, recycling and trash storage areas in a neat and orderly manner, and fully screened from public view. Outside storage shall not exceed the height of the screening walls. g) Metal Storage Containers: The developer shall NOT place metal storage containers in loading areas or other areas unless specifically approved by this or subsequent land use approvals. h) Screening: The developer shall maintain screening that is visually attractive. All trash areas, loading areas, mechanical equipment (including roof top) shall be screened from public view. i) Signage: The developer shall maintain all on-site signs, including posted area signs (e.g. "No Trespassing") in a clean readable condition at all times. The developer shall remove all graffiti and repair vandalism on a regular basis. Signs on the site shall be of the size and general location as shown on the approved site plan or subsequently a County-approved sign plan. j) Lighting: The developer shall maintain any lighting so that they operate properly for safety purposes and do not project onto adjoining properties or roadways. Lighting shall adhere to applicable glare and night light rules. k) Parking and on-site circulation: The developer shall maintain all parking and on-site circulation requirements, including surfaces, all markings and traffic/directional signs in an un-faded condition as identified on the approved site plan. Any modification to parking and access layout requires the Planning Division review and approval. The markings and signs shall be clearly defined, un-faded and legible; these include parking spaces, disabled space and access path of travel, directional designations and signs, stop signs, pedestrian crossing, speed humps and "No Parking", "Carpool", and "Fire Lane" designations. l) Fire Lanes: The developer shall clearly define and maintain in good condition at all times all markings required by the Fire Department, including "No Parking" designations and "Fire Lane" designations.

12 **Clear Sight Triangle** - Status: Outstanding
Adequate visibility for vehicular and pedestrian traffic shall be provided at clear sight triangles at all 90 degree angle intersections of public rights-of-way and private driveways. All signs, structures and landscaping located within any clear sight triangle shall comply with the height and location requirements specified by County Development Code (SBCC§ 83.02.030) or as otherwise required by County Traffic

13 **Lighting** - Status: Outstanding
Lighting shall comply with Table 83-7 "Shielding Requirements for Outdoor Lighting in the Mountain Region and Desert Region" of the County's Development Code (i.e. "Dark Sky" requirements). All lighting shall be limited to that necessary for maintenance activities and security purposes. This is to allow minimum obstruction of night sky remote area views. No light shall project onto adjacent roadways in a manner that interferes with on-coming traffic. All signs proposed by this project shall only be lit by steady, stationary, shielded light directed at the sign, by light inside the sign, by direct stationary neon lighting or in the case of an approved electronic message center sign, an alternating message no more than once every five seconds.

14 **Underground Utilities** - Status: Outstanding
No new above-ground power or communication lines shall be extended to the site. All required utilities shall be placed underground in a manner that complies with the California Public Utilities Commission General Order 128, and avoids disturbing any existing/natural vegetation or the site appearance.

15 **Construction Hours** - Status: Outstanding
Construction will be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday in accordance with the County of San Bernardino Development Code standards. No construction activities are permitted outside of these hours or on Sundays and Federal holidays.

16 **Construction Noise** - Status: Outstanding
The following measures shall be adhered to during the construction phase of the project: - All construction equipment shall be muffled in accordance with manufacturer's specifications. - All construction staging shall be performed as far as possible from occupied dwellings. The location of staging areas shall be subject to review and approval by the County prior to the issuance of grading and/or building permits. - All stationary construction equipment shall be placed in a manner so that emitted noise is directed away from sensitive receptors (e.g. residences and schools) nearest the project site.

17 **Cultural Resources** - Status: Outstanding
During grading or excavation operations, should any potential paleontological or archaeological artifacts be unearthed or otherwise discovered, the San Bernardino County Museum shall be notified and the uncovered items shall be preserved and curated, as required. For information, contact the County Museum, Community and Cultural Section, telephone (909) 798-8570.

18 **GHG - Operational Standards** - Status: Outstanding
The developer shall implement the following as greenhouse gas (GHG) mitigation during the operation of the approved project: a. Waste Stream Reduction. The "developer" shall provide to all tenants and project employees County-approved informational materials about methods and need to reduce the solid waste stream and listing available recycling services. b. Vehicle Trip Reduction. The "developer" shall provide to all tenants and project employees County-approved informational materials about the need to reduce vehicle trips and the program elements this project is implementing. Such elements may include: participation in established ride-sharing programs, creating a new ride-share employee vanpool, designating preferred parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading for ride sharing vehicles with benches in waiting areas, and/or providing a web site or message board for coordinating rides. c. Provide Educational Materials. The developer shall provide to all tenants and staff education materials and other publicity about reducing waste and available recycling services. The education and publicity materials/program shall be submitted to County Planning for review and approval. d. Landscape Equipment. The developer shall require in the landscape maintenance contract and/or in onsite procedures that a minimum of 20% of the landscape maintenance equipment shall be electric-powered.

19 **On-going Condition** - Status: Outstanding
SC CUL-2 Human Remains. In the event that that human remains (or remains that may be human) are discovered at the Project site, State Health and Safety Code Section 7050.5. states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner will notify the NAHC, which will determine and notify an MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

Public Health– Environmental Health Services

20 **Noise Levels** - Status: Outstanding
Noise level shall be maintained at or below County Standards, Development Code Section 83.01.080.

21 **OWTS Maintenance** - Status: Outstanding
The onsite wastewater treatment system shall be maintained so as not to create a public nuisance and shall be serviced by an EHS permitted pumper.

22 **Refuse Storage and Disposal** - Status: Outstanding
All refuse generated at the premises shall at all times be stored in approved containers and shall be placed in a manner so that environmental public health nuisances are minimized. All refuse not containing garbage shall be removed from the premises at least 1 time per week, or as often as necessary to minimize public health nuisances. Refuse containing garbage shall be removed from the premises at least 2 times per week, or as often if necessary to minimize public health nuisances, by a permitted hauler to an approved solid waste facility in conformance with San Bernardino County Code Chapter 8, Section 33.0830 et. seq.

INFORMATIONAL

County Fire - Community Safety

23 **F01 Jurisdiction** - Status: Outstanding
The above referenced project is under the jurisdiction of the San Bernardino County Fire Department herein "Fire Department". Prior to any construction occurring on any parcel, the applicant shall contact the Fire Department for verification of current fire protection requirements. All new construction shall comply with the current California Fire Code requirements and all applicable statutes, codes, ordinances, and standards of the Fire Department.

24 **F04 Fire Permit Expiration** - Status: Outstanding
Construction permits shall automatically expire and become invalid unless the work authorized such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Suspension or abandonment shall mean that no inspection by the Department has occurred with 180 days of any previous inspection. After a construction permit becomes invalid and before such previously approved work recommences, a new permit shall be first obtained and the fee to recommence work shall be one-half the fee for the new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year. A request to extend the permit may be made in writing PRIOR TO the expiration date justifying the reason that the permit should be extended.

25 **F17 Access Road Grade** - Status: Outstanding
Fire access roadways shall not exceed a maximum of twelve (12%) percent grade at any point. Fire access roadways or driveways may be increased to fourteen (14%) percent grade for a distance not to exceed five hundred (500) feet. Fire access roadways providing access to no more than two (2) one or two-family dwellings may be increased to a maximum of sixteen (16%) percent grade not to exceed five hundred (500) feet. Grades across the width of a fire access roadways shall not exceed five (5%) percent. In order to accommodate proper angles of approach and departure, gradient shall not exceed five (5%) percent change along any ten (10) foot section.

26 **F36 Sprinkler Installation Letter** - Status: Outstanding
The applicant shall submit a letter to the Fire Department agreeing and committing to installation of a fire protection system prior to the building inspection for drywall and insulation.

27 **F67 Emergency Responder Radio System** - Status: Outstanding
An emergency responder radio system is required. The applicant shall hire a qualified designer, to submit detailed plans with manufactures' specification sheets to the Fire Department for review and approval. The required fees shall be paid at the time of plan submittal. Frequencies used and tower locations can be found at https://www.radioreference.com/apps/db/?sid=7016 https://www.radioreference.com/apps/db/?action=siteMap&sid=7016&type=fcc

28 **F70 Additional Requirements** - Status: Outstanding
In addition to the Fire requirements stated herein, other onsite and off-site improvements may be required which cannot be determined at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to this office.

29 **F70 Additional Requirements** - Status: Outstanding
In addition to the Fire requirements stated herein, other onsite and off-site improvements may be required which cannot be determined at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to this office. 1. Show the turning radius on site per Standard A-1 2. 30' Fire Access will be required if the building exceeds 30' in height, show the height of the building on the plans. 3. What type of building construction will this be? Fire Flow is based off the Type of construction. 4. Deferred submittal will be required for Sprinklers, Alarms, Underground Fire Water and High Pile Storage.

30 **F71 Proposal Changes** - Status: Outstanding
Any changes to this proposal shall require new Fire Department condition letter.

31 **F71 Proposal Changes** - Status: Outstanding
Any changes to this proposal shall require new Fire Department condition letter.

Land Use Services - Land Development

32 **Additional Drainage Requirements** - Status: Outstanding
In addition to drainage requirements stated herein, other "on-site" and/or "off-site" improvements may be required which cannot be determined from tentative plans at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to this office.

33 **BMP Enforcement** - Status: Outstanding
In the event the property owner/"developer" (including any successors or assigns) fails to accomplish the necessary BMP maintenance within five (5) days of being given written notice by the County Department of Public Works, then the County shall cause any required maintenance to be done. The entire cost and expense of the required maintenance shall be charged to the property owner and/or "developer", including administrative costs, attorney's fees, and interest thereon at the rate authorized by the County Code from the date of the original notice to the date the expense is paid in full.

34 **Continuous BMP Maintenance** - Status: Outstanding
The property owner/"developer" is required to provide periodic and continuous maintenance of all Best Management Practices (BMP) devices/facilities listed in the County approved final Water Quality Management Plan (WQMP) for the project. Refer to approved WQMP maintenance section.

35 **Erosion Control Installation** - Status: Outstanding
Erosion control devices must be installed and maintained at all perimeter openings and slopes throughout the construction of the project. No sediment is to leave the job site.

36 **Tributary Drainage** - Status: Outstanding
Adequate provisions should be made to intercept and conduct the tributary off-site and on-site 100-year drainage flows around and through the site in a manner that will not adversely affect adjacent or downstream properties at the time the site is developed.

PRIOR TO LAND DISTURBANCE

Land Use Services - Planning

37 **Grading/Land Disturbance Condition** - Status: Outstanding
MM BIO-1 Pre-Construction Nesting Bird Survey. If project activities with potential to indirectly disturb suitable avian nesting habitat within 500 feet of the work area would occur during the nesting season (as determined by a qualified biologist), a qualified biologist with experience in conducting breeding bird surveys will conduct a nesting bird survey no more than three days prior to the initiation of project activities to determine the presence/absence of migratory and resident bird species occurring in suitable nesting habitat. Project activities may begin no more than three days after the completion of the nesting bird survey in the absence of active bird nests. An additional nesting bird survey will be conducted if project activities daily to start within three days of the completion of the preconstruction nesting bird survey. Nesting Bird Exclusionary Buffers. Should nesting birds be found during the pre-construction nesting bird survey, an exclusionary buffer will be established by the qualified biologist in accordance with the Migratory Bird Treaty Act. This buffer will be clearly marked in the filed by construction personnel under the guidance of the biologist, and construction will not be conducted in this zone until the biologist determines that the young have fledged, or the nest is no longer active. Work may only occur during the breeding season if nesting bird surveys indicate the absence of any active nests within the work area. Without the written approval of the CDFW and/or USFWS, no work will occur if listed or fully protected bird species are found to be actively nesting within 500 feet of the area subject to construction activities.

38 **Grading/Land Disturbance Condition** - Status: Outstanding
MM CUL-1 Archaeological Site Monitoring. An archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards for archaeology shall oversee archaeological monitoring of construction-related ground disturbance. Monitoring shall continue until the archaeologist determines that there is a low potential for encountering subsurface archaeological, cultural, or tribal cultural resources. In the event that archaeological cultural resources are identified by the archaeological monitor during ground-disturbing project activities, the nature of the find shall be assessed by the qualified archaeologist, and the qualified archaeologist shall determine if additional cultural resources work is appropriate. Additional cultural resources work may include, but is not limited to, collection and documentation of artifacts, documentation of the cultural resources on State of California Department of Parks and Recreation (DPR) Series 523 forms, or subsurface testing. Upon completion of any cultural resources work for the project, the archaeologist shall prepare a report to document the methods and results of the work. This report shall be submitted to any descendant community involved in the investigation(s) and the South- Central Coastal Information Center (SCCIC).

39 **Grading/Land Disturbance Condition** - Status: Outstanding
SC GEO-1 Compliance with Applicable California Building Code and Project-specific Geotechnical Recommendations. Prior to the approval of grading and/or issuance of building permits, the Project Applicant shall provide evidence to County Staff, for review and approval, that the on-site structure will be designed and will be constructed in conformance with applicable provisions of the 2022 California Building Code (or the current CBC at the time of County review) and the recommendations cited in the Geotechnical Evaluations, prepared by Soils Southwest Inc., dated February 2022. This measure shall be implemented to the satisfaction of the San Bernardino County Building and Safety Division or designee.

40 **Grading/Land Disturbance Condition** - Status: Outstanding
MM GEO-2 Due to the lack of any known fossil specimens or fossil localities form within a several-mile radius encompassing the Project site, paleontological monitoring would not be required during surficial grading activities during Project construction. However, if fossils of any sort are discovered during grading/earthmoving activities, all construction activities shall cease, and the construction contractor shall notify County staff. The Project Applicant shall then retain a certified paleontologist (approved by the County) and the paleontologist shall develop a Paleontological Mitigation Monitoring and Reporting Program (PMMRP), consistent with the provisions of CEQA, those of the County of San Bernardino, and guidelines of the Society of Vertebrate Paleontology Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Once the PMMRP is approved and implemented, construction activities could continue on the Project site.

41 **Grading/Land Disturbance Condition** - Status: Outstanding
MM HAZ-1 Phase 1 Environmental Site Assessment. Prior to the grading of the site, a Phase I Environmental Site Assessment (ESA) shall be prepared for the project site including a field survey and evaluation of the single-family residential dwelling. If the Phase I ESA determines that there are hazardous materials on site (including but not limited to lead-based paint or asbestos-containing materials), a mitigation plan shall be prepared for the project specifying procedures for the safe and proper removal of structures from the project site and proper disposal of hazardous materials pursuant to applicable federal, State, and local regulations. A copy of the Phase I ESA and mitigation plan, if required, shall be submitted to the County of San Bernardino for review prior to construction. All recommendations provided in the Phase I ESA and mitigation plan, if required, shall be followed during construction of the project.

42 **Grading/Land Disturbance Condition** - Status: Outstanding
SC HYD-1 Construction General Permit. Prior to issuance of a grading permit, the project Applicant shall obtain coverage under the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System No. CAS000002, as amended by Orders No. 2010-0014- DWQ and 2012-0006-DWQ, or subsequent permit) (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including a Notice of Intent for coverage under the permit to the State Water Resources Control Board (SWRCB) via the Stormwater Multiple Application and Report Tracking System (SMARTs). The project Applicant shall provide the Waste Discharge Identification Number (WDID) to the County of San Bernardino (County), or designee, to demonstrate proof of coverage under the Construction General Permit. Project construction shall not be initiated until a WDID is received from the SWRCB and is provided to the County, or designee. A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and implemented for the proposed project in compliance with the requirements of the Construction General Permit. The SWPPP shall identify construction best management practices (BMPs) to be implemented to ensure that the potential for soil erosion and sedimentation is minimized and to control the discharge of pollutants in stormwater runoff as a result of construction activities. Upon completion of construction and stabilization of the site, a Notice of Termination shall be submitted via SMARTs.

43 **Grading/Land Disturbance Condition** - Status: Outstanding
Prior to the commencement of any land disturbing activities, the Project Applicant shall obtain coverage under the Construction General Permit, develop a Stormwater Pollution Prevention Plan, and submit an erosion control plan to the County for review and approval that incorporates Best Management Practices to prevent erosion during construction activities pursuant to Chapter 85.11.030 of the County Municipal Code.

44 **Grading/Land Disturbance Condition** - Status: Outstanding
SC HYD-3 Prior to issuance of a grading permit, the project applicant shall submit a Final Water Quality Management Plan (Final WQMP) to the County of San Bernardino (County) for review and approval in compliance with the requirements of the Santa Ana RWQCB's NPDES Permit Waste Discharge Requirements for the San Bernardino County Flood Control District, the County of San Bernardino, and the Incorporated Cities of San Bernardino County Within the Santa Ana Region Area-Wide Urban Stormwater Runoff Management Program (Order No. R8-2010-0036, NPDES No. CAS618036) (San Bernardino County MS4 Permit). The Final WQMP shall specify the Best Management Practices (BMPs) to be incorporated into the Project design to target pollutants of concern in stormwater runoff from the Project site and the necessary operation and maintenance activity for each BMP. The County shall ensure that the BMPs specified in the Final WQMP are incorporated into the final Project design. The proposed BMPs specified in the Final WQMP shall be incorporated into the grading and development plans submitted to the County for review and approval. Project occupancy and operation shall be in accordance with the schedule outlined in the WQMP.

45 **Corner Records Required Before Grading** - Status: Outstanding
Pursuant to Sections 8762(b) and/or 8773 of the Business and Professions Code, a Record of Survey or Corner Record shall be filed under any of the following circumstances: a. Monuments set to mark property lines or corners; b. Performance of a field survey to establish property boundary lines for the purposes of construction staking, establishing setback lines, writing legal descriptions, or for boundary establishment/mapping of the subject parcel; c. Any other applicable circumstances pursuant to the Business and Professions Code that would necessitate filing of a Record of Survey.

46 **Monument Disturbed by Grading** - Status: Outstanding
If any activity on this project will disturb ANY land survey monumentation, including but not limited to vertical control points (benchmarks), said monumentation shall be located and referenced by or under the direction of a licensed land surveyor or registered civil engineer authorized to practice land surveying PRIOR to commencement of any activity with the potential to disturb said monumentation, and a corner record or record of survey of the references shall be filed with the County Surveyor pursuant to Section 8771(b) Business and Professions Code.

Land Use Services - Building and Safety

47 **Demolition Permit** - Status: Outstanding
Obtain a demolition permit for any building/s or structures to be demolished. Underground structures must be broken in, back-filled and inspected before covering.

48 **Geotechnical Report** - Status: Outstanding
A geotechnical (soil) report shall be submitted to the Building and Safety Division for review and approval prior to issuance of grading permits or land disturbance.

49 **Wall Plans** - Status: Outstanding
Submit plans and obtain separate building permits for any required retaining walls.

Land Use Services - Land Development

50 **Drainage Improvements** - Status: Outstanding
A Registered Civil Engineer (RCE) shall investigate and design adequate drainage improvements to intercept and conduct the off-site and on-site 100-year drainage flows around and through the site in a safe manner that will not adversely affect adjacent or downstream properties. Submit drainage study for review and obtain approval. A $750 deposit for drainage study review will be collected upon submittal to the Land Development Division. Deposit amounts are subject to change in accordance with the latest approved fee schedule.

51 **FEMA Flood Zone** - Status: Outstanding
The project is located within Flood Zone X-Unshaded according to FEMA Panel Number 06071C8651H dated 08/28/2008. No elevation requirements. The requirements may change based on the recommendations of a drainage study accepted by the Land Development Division and the most current Flood Map prior to issuance of grading permit.

52 **Grading Plans** - Status: Outstanding
Grading and erosion control plans shall be prepared in accordance with the County's guidance documents (which can be found here: https://lus.sbcounty.gov/land-development-home/grading-and-erosion-control/) and submitted for review with approval obtained prior to construction. All drainage and WQMP improvements shall be shown on the grading plans according to the approved final drainage study and WQMP reports. Fees for grading plans will be collected upon submittal to the Land Development Division and are determined based on the amounts of cubic yards of cut and fill. Fee amounts are subject to change in accordance with the latest approved fee schedule.

53 **NPDES Permit** - Status: Outstanding
An NPDES permit - Notice of Intent (NOI) - is required on all grading of one (1) acre or more prior to issuance of a grading/construction permit. Contact your Regional Water Quality Control Board for specifics. www.swrcb.ca.gov

54 **On-site Flows** - Status: Outstanding
On-site flows need to be directed to the nearest County maintained road or drainage facilities unless a drainage acceptance letter is secured from the adjacent property owners and provided to Land Development.

55 **Regional Board Permit** - Status: Outstanding
Construction projects involving one or more acres must be accompanied by Regional Board permit WDID #. Construction activity includes clearing, grading, or excavation that results in the disturbance of at least one (1) acre of land total.

56 **San Sevaine Fee** - Status: Outstanding
The project site is located within the San Sevaine Drainage Fee area and is subject to a fee of $4,405 per net developed acre that is to be paid prior to issuance of any grading or building permit. (SBC Ord, No. 3358) Total net developed acreage is 1.57 acres and the fee shall be $6,915.85.

57 **WQMP** - Status: Outstanding
A completed Water Quality Management Plan (WQMP) shall be submitted for review and approval obtained prior to construction. A $2,650 deposit for WQMP review will be collected upon submittal to the Land Development Division. Deposit amounts are subject to change in accordance with the latest approved fee schedule. Review processed on an actual cost basis. Copies of the WQMP guidance and template can be found at: (https://dpw.sbcounty.gov/wqmp-templates-and-forms/)

58 **WQMP Inspection Fee** - Status: Outstanding
The developer shall provide a $3,600 deposit to Land Development Division for inspection of the approved WQMP. Deposit amounts are subject to change in accordance with the latest approved fee schedule.

Public Health– Environmental Health Services

59 **Vector Control Requirement** - Status: Outstanding
The project area has a high probability of containing vectors. A vector survey shall be conducted to determine the need for any required control programs. A vector clearance application shall be submitted to the appropriate Mosquito & Vector Control Program. For information, contact EHS Mosquito & Vector Control Program at (800) 442-2283 or West Valley Mosquito & Vector at (909) 635-0307.

PRIOR TO BUILDING PERMIT ISSUANCE

County Fire - Community Safety

60 **F02 Fire Fee** - Status: Outstanding
The required fire fees shall be paid to the San Bernardino County Fire Department/Community Safety Division.

61 **F09 Building Plans** - Status: Outstanding
Building Plans shall be submitted to the Fire Department for review and approval. The required fees shall be paid at the time of plan submittal.

62 **F10 Combustible Protection** - Status: Outstanding
Prior to combustibles being placed on the project site an approved all-weather fire apparatus access surface and operable fire hydrants with acceptable fire flow shall be installed. The topcoat of asphalt does not have to be installed until final inspection and occupancy.

63 **F19 Surface** - Status: Outstanding
Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities. Road surface shall meet the approval of the Fire Chief prior to installation. All roads shall be designed to 85% compaction and/or paving and hold the weight of Fire Apparatus at a minimum of 80K pounds.

64 **F22 Primary Access Paved** - Status: Outstanding
Prior to building permits being issued to any new structure, the primary access road shall be paved or an all-weather surface and shall be installed as specified in the General Requirement conditions including width, vertical clearance and turnouts.

65 **F23 Secondary Access Paved** - Status: Outstanding
Prior to building permits being issued to any new structure, the secondary access road shall be paved or an all-weather surface and shall be installed as specified in the General Requirement conditions including width, vertical clearance and turnouts.

66 **F26 Fire Flow Test** - Status: Outstanding
Please provide a fire flow test report from your water purveyor that has been completed in the last six months demonstrating that the fire flow demand is satisfied.

67 **F27 Water System** - Status: Outstanding
Prior to any land disturbance, the water systems shall be designed to meet the required fire flow for this development and shall be approved by the Fire Department. The required fire flow shall be determined by using California Fire Code.

68 **F28 Water System Commercial** - Status: Outstanding
A water system approved and inspected by the Fire Department is required. The system shall be operational, prior to any combustibles being stored on the site. Fire hydrants shall be spaced no more than three hundred (300) feet apart (as measured along vehicular travel-ways) and no more than three hundred (300) feet from any portion of a structure.

69 **F33 Water System Certification** - Status: Outstanding
The applicant shall provide the Fire Department with a letter from the serving water company, certifying that the required water improvements have been made or that the existing fire hydrants and water system will meet distance and fire flow requirements. Fire flow water supply shall be in place prior to placing combustible materials on the job site

70 **F69 Haz-Mat Approval** - Status: Outstanding
The applicant shall contact the San Bernardino County Fire Department/Hazardous Materials Division (909) 386-8401 for review and approval of building plans, where the planned use of such buildings will or may use hazardous materials or generate hazardous waste materials.

Land Use Services - Building and Safety

71 **Construction Plans** - Status: Outstanding
Any building, sign, or structure to be added to, altered (including change of occupancy/use), constructed, or located on site, will require professionally prepared plans based on the most current adopted County and California Building Codes, submitted for review and approval by the Building and Safety Division.

72 **Temporary Use Permit** - Status: Outstanding
A Temporary Structures (TS) permit for non-residential structures for use as office, retail, meeting, assembly, wholesale, manufacturing, and/ or storage space will be required. A Temporary Use Permit (PTUP) for the proposed structure by the Planning Division must be approved prior to the TS Permit approval. A TS permit is renewed annually and is only valid for a maximum of five (5) years.

Land Use Services - Land Development

73 **Construction Permits** - Status: Outstanding
Prior to installation of road and drainage improvements, a construction permit is required from the County Department of Public Works, Permits/Operations Support Division, Transportation Permits Section (909) 387-1863 as well as other agencies prior to work within their jurisdiction. Submittal shall include a materials report and pavement section design in support of the section shown on the plans. Applicant shall conduct classification counts and compute a Traffic Index (TI) Value in support of the pavement section design.

74 **Encroachment Permits** - Status: Outstanding
Prior to installation of driveways, sidewalks, etc., an encroachment permit is required from the County Department of Public Works, Permits/Operations Support Division, Transportation Permits Section (909) 387-1863 as well as other agencies prior to work within their jurisdiction.

75 **Road Dedication/Improvements** - Status: Outstanding
The developer shall submit for review and obtain approval from the Land Use Services Department the following dedications and plans for the listed required improvements, designed by a Registered Civil Engineer (RCE) licensed in the State of California: Arrow Route (Major Highway – 104 feet): •Road Dedication. An additional 22-foot grant of easement is required to provide a half-width right-of-way of 52 feet, and a 50-foot radius return grant of easement is required at the intersection of Arrow Route and Almond Avenue. •Street Improvements. Design curb and gutter with match up paving 40 feet from centerline. •Sidewalks. Design sidewalks per County Standard 109 Type "B". •Curb Returns and Sidewalk Ramps. Curb returns and sidewalk ramps shall be designed per County Standard 110 and Caltrans standard A88A. Adequate easement shall be provided to ensure sidewalk improvements are within Public right-of-way. •Driveway Approach. Design driveway approach per County Standard 129B and located per County Standard 130. Almond Avenue (Collector – 66 feet): •Road Dedication. An additional 3-foot grant of easement is required to provide a half-width right-of-way of 33 feet. •Street Improvements. Design curb and gutter with match up paving 22 feet from centerline. •Sidewalks. Design sidewalks per County Standard 109 Type "B". •Curb Returns and Sidewalk Ramps. Curb returns and sidewalk ramps shall be designed per County Standard 110 and Caltrans standard A88A. Adequate easement shall be provided to ensure sidewalk improvements are within Public right-of-way. •Driveway Approach. Design driveway approach per County Standard 129B and located per County Standard 130.

76 **Road Standards and Design** - Status: Outstanding
All required street improvements shall comply with latest San Bernardino County Road Planning and Design Standards and the San Bernardino County Standard Plans. Road sections shall be designed to Valley Road Standards of San Bernardino County and to the policies and requirements of the County Department of Public Works and in accordance with the General Plan, Circulation Element.

77 **Slope Tests** - Status: Outstanding
Slope stability tests are required for road cuts or road fills per recommendations of the Geotechnical Engineer to the satisfaction of the County Department of Public Works.

78 **Soils Testing** - Status: Outstanding
Any grading within the road right-of-way prior to the signing of the improvement plans shall be accomplished under the direction of a soils testing engineer. Compaction tests of embankment construction, trench back fill, and all sub-grades shall be performed at no cost to the County and a written report shall be submitted to the Permits/Operations Support Division, Transportation Permits Section of the County Department of Public Works prior to any placement of base materials and/or paving.

79 **Street Gradients** - Status: Outstanding
Road profile grades shall not be less than 0.5% unless the engineer at the time of submittal of the improvement plans provides justification to the satisfaction of the County Department of Public Works confirming the adequacy of the grade.

80 **Street Type Entrance** - Status: Outstanding
Street type entrance(s) with curb returns shall be constructed at the entrance(s) to the development.

81 **Transitional Improvements** - Status: Outstanding
Right-of-way and improvements (including off-site) to transition traffic and drainage flows from proposed to existing sections shall be required as necessary.

82 **Utilities.** - Status: Outstanding
Final plans and profiles shall indicate the location of any existing utility facility or utility pole which would affect construction, and any such utility shall be relocated as necessary without cost to the County.

Public Health– Environmental Health Services

83 **Demolition Inspection Required** - Status: Outstanding
All demolition of structures shall have a vector inspection prior to the issuance of any permits pertaining to demolition or destruction of any premises. For information, contact EHS Mosquito & Vector Control Program at (800) 442-2283 or West Valley Mosquito & Vector at (909) 635-0307.

84 **Existing OWTS** - Status: Outstanding
Existing onsite wastewater treatment system can be used if applicant provides an EHS approved certification that indicates the system functions properly, meets code, has the capacity required for the proposed project, and meets LAMP requirements.

85 **Existing Wells** - Status: Outstanding
If wells are found on-site, evidence shall be provided that all wells are: (1) properly destroyed, by an approved C57 contractor and under permit from the County OR (2) constructed to EHS standards, properly sealed and certified as inactive OR (3) constructed to EHS standards and meet the quality standards for the proposed use of the water (industrial and/or domestic). Evidence, such as a well certification, shall be submitted to EHS for approval.

86 **New OWTS** - Status: Outstanding
If sewer connection and/or service are unavailable, onsite wastewater treatment system(s) may then be allowed under the following conditions: a. A soil percolation report shall be submitted to EHS for review and approval. For information, please contact the Wastewater Section at (800) 442-2283. b. An Alternative Treatment System, if applicable, shall be required.

87 **Preliminary Acoustical Information** - Status: Outstanding
Submit preliminary acoustical information demonstrating that the proposed project maintains noise levels at or below San Bernardino County Noise Standard(s), San Bernardino Development Code Section 83.01.080. The purpose is to evaluate potential future on-site and/or adjacent off-site noise sources. If the preliminary information cannot demonstrate compliance to noise standards, a project specific acoustical analysis shall be required. Submit information/analysis to the EHS for review and approval. For information and acoustical checklist, contact EHS at (800) 442-2283.

88 **Sewage Disposal** - Status: Outstanding
Method of sewage disposal shall be sewer service provided by City of Fontana or an EHS approved onsite wastewater treatment system (OWTS) that conforms to the Local Agency Management Program (LAMP).

89 **Sewer Service Verification Letter** - Status: Outstanding
Applicant shall procure a verification letter from the sewer service provider identified. This letter shall state whether or not sewer connection and service shall be made available to the project by the sewer provider. The letter shall reference the Assessor's Parcel Number(s).

90 **Water and Sewer - LAFCO** - Status: Outstanding
Water and/or Sewer Service Provider Verification. Please provide verification that the parcel(s) associated with the project is/are within the jurisdiction of the water and/or sewer service provider. If the parcel(s) associated with the project is/are not within the boundaries of the water and/or sewer service provider, submit to EHS verification of Local Agency Formation Commission (LAFCO) approval of either: 1. Annexation of parcels into the jurisdiction of the water and/or sewer service provider; or, 2. Out-of-agency service agreement for service outside a water and/or sewer service provider's boundaries. Such agreement/contract is required to be reviewed and authorized by LAFCO pursuant to the provisions of Government Code Section 56133.

91 **Water Purveyor** - Status: Outstanding
Water purveyor shall be Fontana WC or EHS approved.

92 **Water Service Verification Letter** - Status: Outstanding
Applicant shall procure a verification letter from the water service provider. This letter shall state whether or not water connection and service shall be made available to the project by the water provider. This letter shall reference the File Index Number and Assessor's Parcel Number(s). For projects with current active water connections, a copy of water bill with project address may suffice.

PRIOR TO OCCUPANCY

Land Use Services - Planning

93 **GHG - Installation/Implementation Standards** - Status: Outstanding
The developer shall submit for review and obtain approval from County Planning of evidence that all applicable GHG performance standards have been installed, implemented properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety. These installations/procedures include the following: a) Design features and/or equipment that cumulatively increases the overall compliance of the project to exceed Title 24 minimum standards by five percent. b) All interior building lighting shall support the use of fluorescent light bulbs or equivalent energy-efficient lighting. c) Installation of both the identified mandatory and optional design features or equipment that have been constructed and incorporated into the facility/structure.

County Fire - Community Safety

94 **F06 Inspection by Fire Department** - Status: Outstanding
Permission to occupy or use the building (Certification of Occupancy or Shell Release) will not be granted until the Fire Department inspects, approves and signs off on the Building and Safety job card for "fire final".

Land Use Services - Building and Safety

95 **Condition Compliance Release Form Sign-off** - Status: Outstanding
Prior to occupancy all Department/Division requirements and sign-offs shall be completed.

Land Use Services - Land Development

96 **Drainage Improvements** - Status: Outstanding
All required drainage improvements shall be completed by the applicant. The private Registered Civil Engineer (RCE) shall inspect improvements outside the County right-of-way and certify that these improvements have been completed according to the approved plans. Certification letter shall be submitted to Land Development.

97 **WQMP Improvements** - Status: Outstanding
All required WQMP improvements shall be completed by the applicant and inspected/approved by the County Department of Public Works. An electronic file of the approved final WQMP shall be submitted to Land Development Division, Drainage Section.

98 **LDD Requirements** - Status: Outstanding
All LDD requirements shall be completed by the applicant prior to occupancy.

99 **Parkway Planting** - Status: Outstanding
Trees, irrigation systems, and landscaping required to be installed on public right-of-way shall be approved by the County Department of Public Works and Current Planning and shall be maintained by the adjacent property owner or other County-approved entity.

100 **Road Improvements** - Status: Outstanding
All required on-site and off-site improvements shall be completed by the applicant and inspected/approved by the County Department of Public Works.

101 **Structural Section Testing** - Status: Outstanding
A thorough evaluation of the structural road section, to also include parkway improvements, from a qualified materials engineer shall be submitted to the County Department of Public Works.

Public Health– Environmental Health Services

102 **New Alternative Treatment System Permit** - Status: Outstanding
An Alternative Treatment System annual permit shall be required. For information, contact EHS at: (800) 442-2283.

PRIOR TO RECORDATION

County Fire - Community Safety

103 **F16 Access** - Status: Outstanding
The development shall have a minimum of ___two___ points of vehicular access. These are for fire/emergency equipment access and for evacuation routes. a. Single Story Road Access Width. All buildings shall have access provided by approved roads, alleys and private drives with a minimum twenty-six (26) foot unobstructed width and vertically to fourteen (14) feet six (6) inches in height. b. Multi-Story Road Access Width. Buildings three (3) stories in height or more shall have a minimum access of thirty (30) feet unobstructed width and vertically to fourteen (14) feet six (6) inches in height.

PRIOR TO FINAL INSPECTION

County Fire - Community Safety

104 **F11 Combustible Vegetation** - Status: Outstanding
Combustible vegetation shall be removed as follows: a. Where the average slope of the site is less than 15% - Combustible vegetation shall be removed a minimum distance of thirty (30) feet from all structures or to the property line, whichever is less. b. Where the average slope of the site is 15% or greater - Combustible vegetation shall be removed a minimum one hundred (100) feet from all structures or to the property line, whichever is less. County Ordinance #3586

105 **F24 Fire Lanes** - Status: Outstanding
The applicant shall submit a fire lane plan to the Fire Department for review and approval. Fire lane curbs shall be painted red. "No Parking, Fire Lane" signs shall be installed on public/private roads in accordance with the approved plan.

106 **F35 Hydrant Marking** - Status: Outstanding
Blue reflective pavement markers indicating fire hydrant locations shall be installed as specified by the Fire Department. In areas where snow removal occurs, or non-paved roads exist, the blue reflective hydrant marker shall be posted on an approved post along the side of the road, no more than three (3) feet from the hydrant and at least six (6) feet high above the adjacent road.

107 **F37 Fire Sprinkler-NFPA #13** - Status: Outstanding
An automatic fire sprinkler system complying with NFPA Pamphlet #13 and Fire Department standards is required. The applicant shall hire a licensed fire sprinkler contractor. The fire sprinkler contractor shall submit plans with hydraulic calculations, manufacturers specification sheets and a letter from a licensed structural (or truss) engineer with a stamp verifying the roof is capable of accepting the point loads imposed on the building by the fire sprinkler system design to the Fire Department for approval. The contractor shall submit plans showing type of storage and use with the applicable protection system. The required fees shall be paid at the time of plan submittal.

108 **F40 Roof Certification** - Status: Outstanding
A letter from a licensed structural (or truss) engineer shall be submitted with an original wet stamp at time of fire sprinkler plan review, verifying the roof is capable of accepting the point loads imposed on the building by the fire sprinkler system design.

109 **F41 Fire Alarm** - Status: Outstanding
A manual, automatic or manual and automatic fire alarm system complying with the California Fire Code, NFPA and all applicable codes is required. The applicant shall hire a licensed fire alarm contractor. The fire alarm contractor shall submit detailed plans to the Fire Department for review and approval. The required fees shall be paid at the time of plan submittal.

110 **F44 High-Piled Storage** - Status: Outstanding
The applicant shall submit an application for high-piled storage (internal storage over 12' in height), detailed plans and a commodity analysis report to the Fire Department for review and approval. The applicant shall submit the approved plan to Building and Safety for review with building plans. If the occupancy classification is designated as S-2, commodities to be stored will be limited to products of light hazard classification only. The required fees shall be paid at the time of plan submittal.

111 **F45 Fire Extinguishers** - Status: Outstanding
Hand portable fire extinguishers are required. The location, type, and cabinet design shall be approved by the Fire Department.

112 **F48 Material Identification Placards** - Status: Outstanding
The applicant shall install Fire Department approved material identification placards on the outside of all buildings and/or storage tanks that store or plan to store hazardous or flammable materials in all locations deemed appropriate by the Fire Department. Additional placards shall be required inside the buildings when chemicals are segregated into separate areas. Any business with an N.F.P.A. 704 rating of 2-3-3 or above shall be required to install an approved key box vault on the premises, which shall contain business access keys and a business plan.

113 **F51 Commercial Addressing** - Status: Outstanding
Commercial and industrial developments of 100,000 sq. ft or less shall have the street address installed on the building with numbers that are a minimum eight (8) inches in height and with a one (1) inch stroke. The street address shall be visible from the street. During the hours of darkness, the numbers shall be electrically illuminated (internal or external). Where the building is two hundred (200) feet or more from the roadway, additional non-illuminated address identification shall be displayed on a monument, sign or other approved means with numbers that are a minimum of six (6) inches in height and three-quarter (¾) inch stroke.

114 **F55 Key Box** - Status: Outstanding
An approved Fire Department key box is required. In commercial, industrial and multi-family complexes, all swing gates shall have an approved fire department Lock (Knox ®).

115 **F56 Override Switch** - Status: Outstanding
Where an automatic electric security gate is used, an approved Fire Department override switch (Knox ®) is required.

If you would like additional information regarding any of the conditions in this document, please contact the department responsible for applying the condition and be prepared to provide the Record number above for reference. Department contact information has been provided below.

Department/Agency	Office/Division	Phone Number

Land Use Services Dept.	San Bernardino Govt. Center	(909) 387-8311
(All Divisions)	High Desert Govt. Center	(760) 995-8140
Web Site	https://lus.sbcounty.gov/	
County Fire	San Bernardino Govt. Center	(909) 387-8400
(Community Safety)	High Desert Govt. Center	(760) 995-8190
Web Site	https://www.sbcfire.org/	
County Fire	Hazardous Materials	(909) 386-8401
	Flood Control	(909) 387-7995
Dept. of Public Works	Solid Waste Management	(909) 386-8701
	Surveyor	(909) 387-8149
	Traffic	(909) 387-8186
Web Site	https://dpw.sbcounty.gov/	
Dept. of Public Health	Environmental Health Services	(800) 442-2283
Web Site	https://dph.sbcounty.gov/programs/ehs/	
Local Agency Formation Commission (LAFCO)		(909) 388-0480
Web Site	http://www.sbclafco.org/	
	Water and Sanitation	(760) 955-9885
	Administration,	
	Park and Recreation,	
Special Districts	Roads, Streetlights,	(909) 386-8800
	Television Districts, and Other	
External Agencies (Caltrans, U.S. Army, etc.)		*See condition text for contact information...*

EXHIBIT C

Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program
Initial Study/Mitigated Negative Declaration
Almond Avenue Warehouse/Assembly Building

Prepared by:

County of San Bernardino, Land Use Services Department

385 N. Arrowhead Avenue, 1st Floor

San Bernardino, California 92415-0182

Contact: Jim Morrissey, Planner

MAY 2023

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1 Introduction

The California Environmental Quality Act (CEQA) requires that a public agency adopting a Mitigated Negative Declaration (MND) take affirmative steps to determine that approved mitigation measures are implemented after project approval. The lead or responsible agency must adopt a reporting and monitoring program for the mitigation measures incorporated into a project or included as conditions of approval. The program must be designed to ensure compliance with the MND during project implementation (California Public Resources Code, Section 21081.6(a)(1)).

This Mitigation Monitoring and Reporting Program (MMRP) will be used by the County of San Bernardino (County) to ensure compliance with adopted mitigation measures identified in the MND for the proposed Star Point Properties Sixth Street Warehouse Project when construction begins. The County, as the lead agency, will be responsible for ensuring that all mitigation measures are carried out. Implementation of the mitigation measures would reduce impacts to below a level of significance for air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, and tribal cultural resources.

The remainder of this MMRP consists of a table that identifies the mitigation measures by resource for each project component. Table 1 identifies the mitigation monitoring and reporting requirements, list of mitigation measures, party responsible for implementing mitigation measures, timing for implementation of mitigation measures, agency responsible for monitoring of implementation, and date of completion. With the MND and related documents, this MMRP will be kept on file at the following location:

County of San Bernardino
385 N. Arrowhead Avenue, First Floor
San Bernardino, California 92415

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2 Mitigation Monitoring and Reporting Program Table

Table 1 Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible For Monitoring	Date of Completion/Notes
Biological Resources				
MM BIO-1 Pre-Construction Nesting Bird Survey. If project activities with potential to indirectly disturb suitable avian nesting habitat within 500 feet of the work area would occur during the nesting season (as determined by a qualified biologist), a qualified biologist with experience in conducting breeding bird surveys will conduct a nesting bird survey no more than three days prior to the initiation of project activities to determine the presence/absence of migratory and resident bird species occurring in suitable nesting habitat. Project activities may begin no more than three days after the completion of the nesting bird survey in the absence of active bird nests. An additional nesting bird survey will be conducted if project activities daily to start within three days of the completion of the preconstruction nesting bird survey. **Nesting Bird Exclusionary Buffers.** Should nesting birds be found during the pre-construction nesting bird survey, an exclusionary buffer will be established by the qualified biologist in accordance with the Migratory Bird Treaty Act. This buffer will be clearly marked in the filed by construction personnel under the guidance of the biologist, and construction will not be conducted in this zone until the biologist determines that the young have fledged, or the nest is no longer active. Work may only occur during the breeding season if nesting bird surveys indicate the absence of any active nests within the work area. Without the written approval of the CDFW and/or USFWS, no work will occur if listed or fully protected bird species are found to be actively nesting within 500 feet of the area subject to construction activities.	Prior to Land Disturbance or Grading Permit	Project applicant and their construction contractor	County of San Bernardino	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible For Monitoring	Date of Completion/Notes
Cultural Resources				
MM CUL-1 Archaeological Site Monitoring. An archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards for archaeology shall oversee archaeological monitoring of construction-related ground disturbance. Monitoring shall continue until the archaeologist determines that there is a low potential for encountering subsurface archaeological, cultural, or tribal cultural resources. In the event that archaeological cultural resources are identified by the archaeological monitor during ground-disturbing project activities, the nature of the find shall be assessed by the qualified archaeologist, and the qualified archaeologist shall determine if additional cultural resources work is appropriate. Additional cultural resources work may include, but is not limited to, collection and documentation of artifacts, documentation of the cultural resources on State of California Department of Parks and Recreation (DPR) Series 523 forms, or subsurface testing. Upon completion of any cultural resources work for the project, the archaeologist shall prepare a report to document the methods and results of the work. This report shall be submitted to any descendant community involved in the investigation(s) and the South- Central Coastal Information Center (SCCIC).	Prior to issuance of Land Disturbance or Grading Permit	Project applicant and their construction contractor/consultant	County of San Bernardino	
SC CUL-2 Human Remains. In the event that that human remains (or remains that may be human) are discovered at the Project site, State Health and Safety Code Section 7050.5. states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner will notify the NAHC, which will determine and notify an MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and	Prior to Land Disturbance or Grading Permit Prior to Issuance of Building Permit	Project applicant and their construction contractor/consultant	County of San Bernardino	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible For Monitoring	Date of Completion/Notes
make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.				
Geologic				
SC GEO-1 Compliance with Applicable California Building Code and Project-specific Geotechnical Recommendations. Prior to the approval of grading and/or issuance of building permits, the Project Applicant shall provide evidence to County Staff, for review and approval, that the on-site structure will be designed and will be constructed in conformance with applicable provisions of the 2022 California Building Code (or the current CBC at the time of County review) and the recommendations cited in the Geotechnical Evaluations, prepared by Soils Southwest Inc., dated February 2022. This measure shall be implemented to the satisfaction of the San Bernardino County Building and Safety Division or designee.	Prior to issuance of Land Disturbance or Grading Permit	Project applicant and their construction contractor/consultant	County of San Bernardino	
MM GEO-2 Due to the lack of any known fossil specimens or fossil localities form within a several-mile radius encompassing the Project site, paleontological monitoring would not be required during surficial grading activities during Project construction. However, if fossils of any sort are discovered during grading/earthmoving activities, all construction activities shall cease, and the construction contractor shall notify County staff. The Project Applicant shall then retain a certified paleontologist (approved by the County) and the paleontologist shall develop a Paleontological Mitigation Monitoring and Reporting Program (PMMRP), consistent with the provisions of CEQA, those of the County of San Bernardino, and guidelines of the Society of Vertebrate Paleontology	Prior to issuance of Land Disturbance or Grading Permit	Project applicant and/or their construction contractor/consultant	County of San Bernardino	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible For Monitoring	Date of Completion/Notes
Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Once the PMMRP is approved and implemented, construction activities could continue on the Project site.				
Hydrology				
SC HYD-1 Construction General Permit. Prior to issuance of a grading permit, the project Applicant shall obtain coverage under the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System No. CAS000002, as amended by Orders No. 2010-0014-DWQ and 2012-0006-DWQ, or subsequent permit) (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including a Notice of Intent for coverage under the permit to the State Water Resources Control Board (SWRCB) via the Stormwater Multiple Application and Report Tracking System (SMARTs). The project Applicant shall provide the Waste Discharge Identification Number (WDID) to the County of San Bernardino (County), or designee, to demonstrate proof of coverage under the Construction General Permit. Project construction shall not be initiated until a WDID is received from the SWRCB and is provided to the County, or designee. A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and implemented for the proposed project in compliance with the requirements of the Construction General Permit. The SWPPP shall identify construction best management practices (BMPs) to be implemented to ensure that the potential for soil erosion and sedimentation is minimized and to control the discharge of pollutants in stormwater runoff as a result of construction activities. Upon completion of construction and stabilization of the site, a Notice of Termination shall be submitted via SMARTs.	Prior to issuance of Land Disturbance or Grading Permit	Project applicant and/or their construction contractor/consultant	County of San Bernardino	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible For Monitoring	Date of Completion/Notes
SC HYD-2 Prior to the commencement of any land disturbing activities, the Project Applicant shall obtain coverage under the Construction General Permit, develop a Stormwater Pollution Prevention Plan, and submit an erosion control plan to the County for review and approval that incorporates Best Management Practices to prevent erosion during construction activities pursuant to Chapter 85.11.030 of the County Municipal Code.	Prior to issuance of Land Disturbance or Grading Permit	Project applicant and/or their construction contractor/consultant	County of San Bernardino	
SC HYD-3 Prior to issuance of a grading permit, the project applicant shall submit a Final Water Quality Management Plan (Final WQMP) to the County of San Bernardino (County) for review and approval in compliance with the requirements of the Santa Ana RWQCB's NPDES Permit Waste Discharge Requirements for the San Bernardino County Flood Control District, the County of San Bernardino, and the Incorporated Cities of San Bernardino County Within the Santa Ana Region Area-Wide Urban Stormwater Runoff Management Program (Order No. R8-2010-0036, NPDES No. CAS618036) (San Bernardino County MS4 Permit). The Final WQMP shall specify the Best Management Practices (BMPs) to be incorporated into the Project design to target pollutants of concern in stormwater runoff from the Project site and the necessary operation and maintenance activity for each BMP. The County shall ensure that the BMPs specified in the Final WQMP are incorporated into the final Project design. The proposed BMPs specified in the Final WQMP shall be incorporated into the grading and development plans submitted to the County for review and approval. Project occupancy and operation shall be in accordance with the schedule outlined in the WQMP.	Prior to issuance of Land Disturbance or Grading Permit	Project applicant and/or their construction contractor/consultant	County of San Bernardino	
Hazards				
MM HAZ-1 Phase 1 Environmental Site Assessment. Prior to the grading of the site, a Phase I Environmental Site Assessment (ESA) shall be prepared for the project site including a field survey and evaluation of the single-	Prior to issuance of Land Disturbance or Grading Permit	Project applicant and/or their construction contractor	County of San Bernardino	

Mitigation Measure	Implementation Timing	Party Responsible for Implementation	Party Responsible For Monitoring	Date of Completion/Notes
family residential dwelling. If the Phase I ESA determines that there are hazardous materials on site (including but not limited to lead-based paint or asbestos-containing materials), a mitigation plan shall be prepared for the project specifying procedures for the safe and proper removal of structures from the project site and proper disposal of hazardous materials pursuant to applicable federal, State, and local regulations. A copy of the Phase I ESA and mitigation plan, if required, shall be submitted to the County of San Bernardino for review prior to construction. All recommendations provided in the Phase I ESA and mitigation plan, if required, shall be followed during construction of the project.				

EXHIBIT D

Comments/Responses to Comments

LSA

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: April 21, 2023

TO: Jim Morrissey, Planner; County of San Bernardino

FROM: LSA Associates, Inc.

SUBJECT: Stewart Almond Warehouse Project (PROJ-2022-00147)

In accordance with Section 15074 of the California Environmental Quality Act (CEQA) Guidelines, prior to approving a project, the decision-making body of the lead agency shall consider the proposed environmental document together with any comments received during the public review process. Although there is no legal requirement to formally respond to comments on a proposed Mitigated Negative Declaration (MND) as there is for an Environmental Impact Report (EIR), this memorandum provides a response to the written comments received on the Stewart Almond Warehouse Project Initial Study/Mitigated Negative Declaration (IS/MND) to aid the County of San Bernardino, Planning Division, decision-makers in their review of the proposed project.

The Draft IS/MND was available for public review and comment from March 9, 2023, to April 10, 2023. One comment letter was received on the Draft IS/MND. In the following pages, the comments and responses are enumerated to allow for cross-referencing of CEQA-related comments. The enumerated comment letter is included in this memorandum, followed by the respective responses. Individual comments within the letter are numbered consecutively. For example, comment A-1 is the first numbered comment in Letter A.

The following comment letter was submitted:

Letter A
Adam Frankel, Lozeau Drury LLP
April 10, 2023

As noted above, CEQA does not require or provide guidance on responding to comments on MNDs; therefore, this memorandum follows *State CEQA Guidelines* Section 15088, applicable to responses to comments on EIRs, which requires that agencies respond only to significant environmental issues raised in connection with the project. Therefore, this document focuses primarily on responding to comments that relate to the adequacy of the information and environmental analysis provided in the IS/MND.

Attachments: Letter A - Adam Frankel, Lozeau Drury LLP
Responses to Comment Letter A - Adam Frankel, Lozeau Drury LLP

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April 10, 2023

Via E-mail

Jim Morrissey, Planner
Land Use Services Department
County of San Bernardino
385 N. Arrowhead Ave.
San Bernardino, CA 92415
jim.morrissey@lus.sbcounty.gov

Re: IS/MND for the Stewart Almond Warehouse Project (PROJ -2022-00147)

Dear Mr. Morrissey:

I am writing on behalf of Supporters Alliance for Environmental Responsibility ("SAFER") regarding the Initial Study and Mitigated Negative Declaration ("IS/MND" or "MND") prepared for the Stewart Almond Warehouse Project ("Project") (PROJ -2022-00147), for Applicant Stewart Development, LLC (hereinafter the "Applicant"), including all actions related or referring to the proposed construction and operation of an approximately 40,000-square-foot warehouse facility, to be located at 8531 Almond Avenue in San Bernardino County ("County") (APN No.: 230-131-010).

SAFER's review of the Project has been assisted by air quality experts Matt Hagemann, P.G., C.Hg. and Paul E. Rosenfeld, Ph.D., of the environmental consulting firm, Soil/Water/Air Protection Enterprise ("SWAPE"). SWAPE's expert comments and CVs are attached as Exhibit A. A-1

After reviewing the IS/MND, with the assistance of SWAPE, it is evident that there is a fair argument that the Project may have unmitigated adverse environmental impacts. Therefore, CEQA requires that the County prepare an environmental impact report ("EIR") to analyze these impacts and to propose all feasible mitigation measure to reduce those impacts, pursuant to the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000, et seq. SAFER urges the County not to adopt the IS/MND and instead undertake the necessary efforts to prepare an EIR prior to any approvals, as required by CEQA.

LEGAL STANDARD

As the California Supreme Court has held, "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an A-2

EIR." (*Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319-320 (*CBE v. SCAQMD*) (citing *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505).) "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." (Pub. Res. Code ("PRC") § 21068; *see also* 14 CCR § 15382.) An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial." (*No Oil, Inc.*, 13 Cal.3d at 83.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 109 (*CBE v. CRA*).)

The EIR is the very heart of CEQA. (*Bakersfield Citizens for Local Control v. City of Bakersfield (*2004) 124 Cal.App.4th 1184, 1214 (*Bakersfield Citizens*); *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927.) The EIR is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return." (*Bakersfield Citizens*, 124 Cal.App.4th at 1220.) The EIR also functions as a "document of accountability," intended to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." (*Laurel Heights Improvements Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392.) The EIR process "protects not only the environment but also informed self-government." (*Pocket Protectors*, 124 Cal.App.4th at 927.)

A-2

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." (PRC § 21080(d); *see also Pocket Protectors*, 124 Cal.App.4th at 927.) In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (14 CCR § 15371), only if there is not even a "fair argument" that the project will have a significant environmental effect. (PRC §§ 21100, 21064.) Since "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed only in cases where "the proposed project will not affect the environment at all." (*Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440.)

Where an initial study shows that the project may have a significant effect on the environment, a mitigated negative declaration may be appropriate. However, a mitigated negative declaration is proper *only* if the project revisions would avoid or mitigate the potentially significant effects identified in the initial study "to a point where clearly no significant effect on the environment would occur, and…there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment." (PRC §§ 21064.5, 21080(c)(2); *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 331.) In that context, "may" means a reasonable possibility of a significant effect on the environment. (PRC §§ 21082.2(a), 21100, 21151(a); *Pocket Protectors*, 124 Cal.App.4th at 927; *League for Protection of Oakland's etc. Historic Res. v. City of Oakland*

(1997) 52 Cal.App.4th 896, 904–05.)

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency's decision. (14 CCR § 15064(f)(1); *Pocket Protectors,* 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-51; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.) The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. (*Pocket Protectors*, 124 Cal.App.4th at 928.)

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains: A-2

> This 'fair argument' standard is very different from the standard normally followed by public agencies in their decision making. Ordinarily, public agencies weigh the evidence in the record and reach a decision based on a preponderance of the evidence. [Citation]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact.

(Kostka & Zischke*, Practice Under the California Environmental Quality Act*, §6.37 (2d ed. Cal. CEB 2021).) The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with *a preference for resolving doubts in favor of environmental review*." (*Pocket Protectors*, 124 Cal.App.4th at 928 (emphasis in original).)

I. There is Substantial Evidence of a Fair Argument That the Project Will Have a Significant Impact on Air Quality, Human Health, and Greenhouse Gas Emissions.

Matt Hagemann, P.G., C.Hg., and Dr. Paul E. Rosenfeld, Ph.D., of the environmental consulting firm SWAPE reviewed the IS/MND's analysis of the Project's impacts on air quality, human health, and greenhouse gas emissions. SWAPE's comment letter and CVs are attached as Exhibit A. A-3

A. Inaccurate Air Modeling Undermines the MND's Conclusions.

SWAPE reviewed the Project's CalEEMod output files – the underlying data files used to estimate a project's air emissions – and found that "several model inputs were not consistent with [the] information disclosed in the IS/MND." (Ex. A., p. 3.) For instance, SWAPE found various changes to the Project construction schedule as entered in CalEEMod – changes which were not explained in the MND. A-4

Here, SWAPE notes, "By disproportionately altering and extending some of the individual construction phase lengths without proper justification, the model assumes there are a

greater number of days to complete the construction activities required by the prolonged phases." (*Id*., p. 4.) "As a result, there will be less construction activities required per day and, consequently, less pollutants emitted per day." (*Id*.) Therefore, SWAPE writes, "the model may underestimate the peak daily emissions associated with some phases of construction and should not be relied upon to determine Project significance." (*Id*.) Without any justification for the changes, the MND's air quality and GHG analyses are not supported by substantial evidence.

A-4

B. Updated Modeling Shows the Project Will Have a Potentially Significant Air Quality Impact.

Provided that the Project documents did not accurately assess the Project's construction-related air quality impacts, SWAPE conducted its own analysis using CalEEMod and project-specific information disclosed in project documents. According to this updated analysis, SWAPE found that the Project would produce an estimated 77.5 lbs./day of VOC emissions. (*Id*., p. 4.) This estimate exceeds the SCAQMD significance threshold of 75 lbs./day and represents a potentially significant air quality impact that must be analyzed and mitigated in an EIR. As such, SWAPE writes, "the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the IS/MND." (*Id*., p. 5.) Therefore, the Project should not be approved until an EIR is prepared and properly evaluates and mitigates the Project's significant air quality impacts.

A-5

C. Health Assessment Demonstrates that the Project Involves Significant Health Risk Impacts.

In addition to these modeling inaccuracies, the IS/MND concluded that the Project would have a less-than-significant health risk impact without conducting a quantified construction or operational health risk analysis ("HRA"). (*Id*., p. 9.) This is improper because CEQA requires an analysis to determine whether a Project's toxic air contaminant ("TAC") emissions—including diesel particulate matter ("DPM") emissions—will have potentially adverse impacts on human health. *Sierra Club v. Cty. of Fresno* (2018) 6 Cal. 5th 502, 518 (an EIR must make "a reasonable effort to substantively connect a project's air quality impacts to likely health consequences.") The failure to address potential health-related impacts resulting from the Project's likely air emissions is problematic because operation of construction equipment during construction, as well as truck trips during future operations, will release DPM emissions into the air, affecting local and regional air quality.

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The IS/MND suggests that health risks from exposure to diesel particulate matter would not be significant because the project would not exceed the SCAQMD's Localized Significance Thresholds (LSTs) for construction-generated criteria pollutants. (*Id*., p. 9.) However, as SWAPE explains, LST only evaluates impacts from criteria air pollutants, which does not include DPM. "As a result, health impacts during Project operation from exposure to TACs, such as DPM, were not analyzed, thus leaving a gap in the AQ & GHG Memo's analysis." (*Id*., p. 10.)

DPM is a known human carcinogen which poses unique health risks to nearby sensitive receptors.. DPM contains 40 toxic chemicals, including benzene, arsenic and lead. (www.p65warnings.ca.gov/fact-sheets/diesel-engine-exhaust.) DPM is also listed by the State of California as a toxic air contaminant known to cause cancer in humans. (https://oehha.ca.gov/media/downloads/proposition-65//p65chemicalslistsinglelisttable2021p.pdf.) According to the U.S. Environmental Protection Agency, "Exposure to diesel exhaust can lead to serious health conditions like asthma and respiratory illnesses and can worsen existing heart and lung disease, especially in children and the elderly. These conditions can result in increased numbers of emergency room visits, hospital admissions, absences from work and school, and premature deaths." (https://www.epa.gov/dera/learn-about-impacts-diesel-exhaust-and-diesel-emissions-reduction-act-dera).

The failure to prepare an HRA is also directly contrary to applicable guidance from the California Department of Justice, which recommends that all warehouse projects prepare a quantitative HRA pursuant to guidance from the Office of Environmental Health Hazard Assessment ("OEHHA"). (*Id*., p. 10.) Here, OEHHA recommends that a quantified Health Risk Assessment ("HRA") be prepared to evaluate potential cancer risks for any short-term construction project lasting more than two months, and for the lifetime of any long-term project lasting more than six months. OEHHA guidance also recommends that an exposure duration of 30 years should be used to estimate the individual cancer risk affecting the maximally exposed individual resident ("MEIR") near a proposed Project site. (*Id*., pp. 10-11.)

A-6

Accordingly, because the Project will presumably operate for at least 30 years, the lifetime health risk to nearby sensitive receptors must be estimated by an HRA. "These recommendations reflect the most recent state health risk policies, and as such, an EIR should be prepared to include an analysis of health risk impacts posed to nearby sensitive receptors from Project-generated DPM emissions." (*Id*., p. 11.)

In failing to prepare a quantified construction or operational HRA to determine the impact on nearby sensitive receptors, the Project documents also failed to compare the potentially excess cancer risk beyond the SCAQMD significance threshold of 10 per million. (*Id*.) As such, the County lacks the necessary evidence to show that the Project will have a less-than-significant air quality impact. Therefore, an EIR must be prepared to include an assessment of the health risk posed to nearby existing receptors and provide additional mitigation to reduce this significant impact.

Provided that the IS/MND did not adequately assess the Project's significant adverse health impacts, SWAPE developed a screening-level risk assessment using AERSCREEN, a modeling tool which is recommended by OEHHA for the development of Level 2 Health Risk Screening Assessments ("Level 2 HRSA").

Following this recommended approach for modeling potential health risks, SWAPE estimated the cancer risk for the maximally exposed individual receptor ("MEIR"), in this case a residence located approximately 50 meters from the Project site. (*Id*., pp. 12.) SWAPE's analysis

concluded that Project construction and operations would result in excess cancer risks for infants (19.5 per million) and lifetime residents (34 per million). (*Id*., p. 15.) These risk levels exceed the SCAQMD's health risk significance threshold of 10 per million.

A-6

SWAPE's comments constituted substantial evidence that the Project may have a significant impact on human health. An EIR is required to analyze and mitigate this potentially significant impact.

D. The MND Fails to Adequately Consider the Project's Cumulative Air Quality Impacts.

The IS/MND fails to adequately consider the Project's cumulative air quality impacts and their effect on the health of vulnerable area residents. SWAPE has observed that the Project will have significant cumulative health and air quality impacts when considered together with the high concentration of industrial activity in the surrounding area. (*Id*., pp. 5-9.)

Upon reviewing site-specific data for the proposed Project from CalEnviroScreen 4.0—the California Environmental Protection Agency's statewide screening tool which maps census tracts according to environmental burden and socioeconomic vulnerability—SWAPE found that the Project's census tract registers in the 96th percentile of most polluted census tracts in California. (*Id*., p. 6.) Similarly, data from the SCAQMD's MATES V data visualization tool shows that Project site's surrounding area residents face an existing cancer risk among the 86th percentile of the South Coast Air Basin residents across Southern California (*Id*.)

A-7

The California Department of Justice urges local agencies performing CEQA review of warehouse projects to fully analyze "all reasonably foreseeable project impacts, **including cumulative impacts**." (California Department of Justice, *Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act*, p. 6, *available at* https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/warehouse-best-practices.pdf.) Furthermore, the guidance adds, "When analyzing cumulative impacts," agencies should thoroughly consider "the project's incremental impact in combination with past, present, and reasonably foreseeable future projects, even if the project's individual impacts alone do not exceed the applicable significance thresholds." (*Id*., emph. added.)

Nonetheless, the IS/MND does not evaluate the Project's cumulative effect on air quality and human health as it relates to existing industrial activity in the area. In order to evaluate the cumulative air quality impact from the several warehouse projects proposed or built in a one-mile radius of the Project site, "the EIR should prepare a cumulative health risk assessment ("HRA") to quantify the adverse health outcome from the effects of exposure to multiple warehouses in the immediate area in conjunction with the poor ambient air quality in the Project's census tract." (*Id*., p. 9.)

E. There is Substantial Evidence of a Fair Argument that the Project Will Have a Significant Impact on Greenhouse Gas Emissions.

The IS/MND estimates that the Project would generate net greenhouse gas ("GHG") emissions of 244.3 $MTCO_2e$/year and asserts that this impact would be less-than-significant. (*Id*., p. 16.) However, this conclusion is incorrect because the IS/MND relies upon an outdated GHG significance threshold to determine Project significance. The IS/MND also incorrectly asserts that the Project will comply with the California Air Resources Board's ("CARB") 2017 Scoping Plan and the Southern California Association of Governments' ("SCAG") 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy ("RTP/SCS"). This assertion is incorrect because the IS/MND fails to consider implementation of performance-based standards under both the CARB Scoping Plan and the RTP/SCS. (*Id*.) Because of these inaccuracies, the models may underestimate the Project's emissions and the IS/MND's quantitative analysis should not be relied upon to determine Project significance.

As noted above, the IS/MND relied upon an outdated quantitative threshold to determine project significance. Specifically, the IS/MND compared the Project's estimated GHG emissions to the South Coast Air Quality Management District ("SCAQMD") significance threshold of 3,000 $MTCO_2e$/year. However, SWAPE writes, this threshold is based upon outdated GHG emissions targets which California was required to have met by 2020. The threshold is thus irrelevant to significance determinations made in 2023. To more accurately determine the Project's GHG significance, potential emissions should be measured according to the SCAQMD 2035 service population efficiency target of 3.0 MT $C0_2e$/SP/year, which was calculated by applying a 40-percent reduction to the 2020 targets. (*Id*., p. 17). A-8

When applying this updated calculation method, which accounts for the number of residents and/or jobs that will be served by a project, SWAPE determined that the Project would exceed the SCAQMD 2035 efficiency target of 3.0 MT $C0_2e$/SP/year, producing an estimated 8.93 MT $C0_2e$/SP/year. (*Id*., p. 18.) This is a potentially significant impact which is not identified or addressed in the IS/MND. Therefore, an EIR must be prepared to include an updated GHG analysis and should include additional mitigation measures to reduce the Project's GHG emissions to less-than-significant levels. SWAPE proposes a detailed list of feasible GHG mitigation measures to reduce this impact, including a requirement that the Project incorporate a solar power system for on-site energy production. (*Id*., pp. 20-23.)

CONCLUSION

Based on the foregoing, the MND for the Project must be withdrawn, and an EIR must be prepared and circulated for public review and comment. A-9

Sincerely,

Adam Frankel
Lozeau Drury LLP

EXHIBIT A

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

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April 3, 2023

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Subject: Comments on the Stewart and Almond Warehouse Project

Dear Mr. Frankel,

We have reviewed the February 2023 Initial Study and Mitigated Negative Declaration ("IS/MND") for the Stewart Almond Warehouse Project ("Project") located in the City of Fontana ("City"). The Project proposes to construct 36,000-square-feet ("SF") of warehouse space, 4,000-SF of office space, and 52 parking spaces on the 2-acre site.

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

A-10

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The IS/MND's air quality analysis relies on emissions calculated with the California Emissions Estimator Model ("CalEEMod") Version 2020.4.0 (p. 24).[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

A-11

[1] "CalEEMod Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/download-model.

Quality Act ("CEQA") requires that such changes be justified by substantial evidence. 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 to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

A-11

When reviewing the Project's CalEEMod output files, provided in the Air Quality, Greenhouse Gas, and Energy Technical Memorandum ("AQ & GHG Memo") provided as Appendix B to the IS/MND, we found that several model inputs were not consistent with information disclosed in the IS/MND. As a result, the Project's construction-related emissions are underestimated. An EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction of the Project will have on local and regional air quality.

Unsubstantiated Changes to Individual Construction Phase Lengths

Review of the CalEEMod output files demonstrates that the "Stewart Almond Warehouse Project" model includes several changes to the default individual construction phase lengths (see excerpt below) (Appendix B, pp. 48, 81, 108).

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	200.00	90.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	2.00	5.00

As a result of these changes, the model includes the following construction schedule (see excerpt below) (Appendix B, pp. 51, 52, 84, 111).

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
1	Demolition	Demolition	5/1/2023	5/12/2023	5	10
2	Site Preparation	Site Preparation	5/15/2023	5/19/2023	5	5
3	Grading	Grading	5/22/2023	5/26/2023	5	5
4	Building Construction	Building Construction	5/29/2023	9/29/2023	5	90
5	Architectural Coating	Architectural Coating	8/14/2023	10/13/2023	5	45
6	Paving	Paving	10/2/2023	10/13/2023	5	10

As demonstrated above, the demolition phase is decreased by 50%, from the default value of 20 to 10 days; the site preparation phase is increased by 150%, from the default value of 2 to 5 days; the grading phase is increased by 25%, from the default value of 4 to 5 days; the building construction phase is decreased by 122%, from the default value of 200 to 90 days; and the architectural coating phase is increased by 350%, from the default value of 10 to 45 days. 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:

> "Construction will begin in May 2023 and end in October 2023. Overlap of building construction and architectural coating" (Appendix B, pp. 46, 79, 106).

Furthermore, the AQ & GHG Memo states:

> "Construction would begin on May 1, 2023, and would end on October 15, 2023. Construction would include demolition, site preparation, grading, building construction, paving, and architectural activities" (p. 2).

However, the model's revised construction schedule remains unsubstantiated as the IS/MND fails to mention the Project's proposed *individual* construction phases whatsoever. This is inconsistent with guidance provided by the CalEEMod User's Guide:

> "CalEEMod was also designed to allow the user to change the defaults to reflect site-or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA."[3]

As the IS/MND only justifies the total construction duration of 5.5 months, the IS/MND fails to provide substantial evidence to support the revised individual construction phase lengths. As such, we cannot verify the changes. Instead, the model should have proportionately altered all phase lengths to match the proposed construction duration of 5.5 months.[4]

A-12

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

[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.
[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. 13,14.
[4] See Attachment A for proportionately altered construction schedule.
[5] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 32.

Demolition involves removing buildings or structures.

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

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

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

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

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

A-12

By disproportionately altering and extending some of the individual construction phase lengths without proper justification, the model assumes there are a greater number of days to complete the construction activities required by the prolonged phases. As a result, there will be less construction activities required per day and, consequently, less pollutants emitted per day. Until we are able to verify the revised construction schedule, the model may underestimate the peak daily emissions associated with some phases of construction and should not be relied upon to determine Project significance.

Updated Analysis Indicates a Potentially Significant Air Quality Impact

In an effort to more accurately estimate the Project's construction-related emissions, we prepared an updated CalEEMod model, using the Project-specific information provided by the IS/MND. In our updated model, we proportionately altered the individual construction phase lengths to match the proposed construction duration of 5.5 months.[6]

Our updated analysis estimates that the Project's construction-related VOC emissions would exceed the applicable South Coast Air Quality Management District ("SCAQMD") threshold of 75-pounds per day ("lbs/day"), as referenced by the IS/MND (p. 25, Table C) (see table below).[7]

SWAPE Criteria Air Pollutant Emissions	
Construction	**VOC** (lbs/day)
IS/MND	9.7
SWAPE	77.5
% Increase	699%
SCAQMD Threshold	**75**
Exceeds?	***Yes***

A-13

[6] See Attachment B for updated CalEEMod model.

[7] "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, March 2023, *available at*: https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25.

As demonstrated above, the Project's construction-related VOC emissions, as estimated by SWAPE, increase by approximately 699% and exceed the applicable SCAQMD significance threshold. Thus, our updated model demonstrates that the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the IS/MND. To reduce the Project's air quality 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 an EIR is prepared, incorporating all feasible mitigation to reduce emissions to less-than-significant levels.

A-13

Disproportionate Health Risk Impacts of Warehouses on Surrounding Communities

Upon review of the IS/MND, we have determined that the development of the proposed Project would result in disproportionate health risk impacts on community members living, working, and going to school within the immediate area of the Project site. According to the SCAQMD:

> "Those living within a half mile of warehouses are more likely to include communities of color, have health impacts such as higher rates of asthma and heart attacks, and a greater environmental burden."[8]

In particular, the SCAQMD found that more than 2.4 million people live within a half mile radius of at least one warehouse, and that those areas not only experience increased rates of asthma and heart attacks, but are also disproportionately Black and Latino communities below the poverty line.[9] Another study similarly indicates that "neighborhoods with lower household income levels and higher percentages of minorities are expected to have higher probabilities of containing warehousing facilities."[10] Additionally, a report authored by the Inland Empire-based People's Collective for Environmental Justice and University of Redlands states:

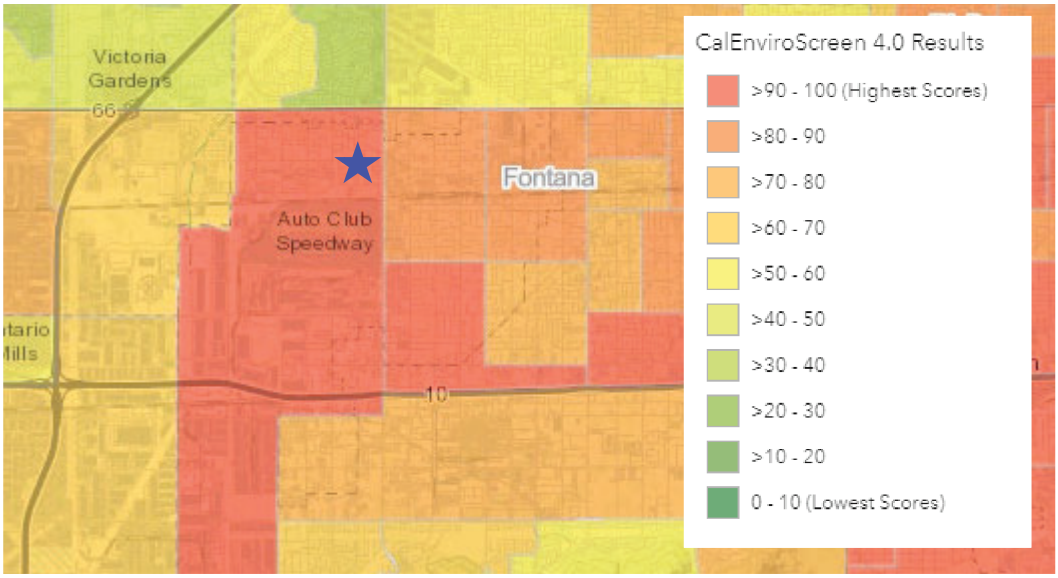
> "As the warehouse and logistics industry continues to grow and net exponential profits at record rates, more warehouse projects are being approved and constructed in low-income communities of color and serving as a massive source of pollution by attracting thousands of polluting truck trips daily. Diesel trucks emit dangerous levels of nitrogen oxide and particulate matter that cause devastating health impacts including asthma, chronic obstructive pulmonary disease (COPD), cancer, and premature death. As a result, physicians consider these pollution-burdened areas 'diesel death zones."[11]

A-14

[8] "South Coast AQMD Governing Board Adopts Warehouse Indirect Source Rule." SCAQMD, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/news-archive/2021/board-adopts-waisr-may7-2021.pdf?sfvrsn=9.
[9] "Southern California warehouse boom a huge source of pollution. Regulators are fighting back." Los Angeles Times, May 2021, *available at:* https://www.latimes.com/california/story/2021-05-05/air-quality-officials-target-warehouses-bid-to-curb-health-damaging-truck-pollution.
[10] "Location of warehouses and environmental justice: Evidence from four metros in California." Metro Freight Center of Excellence, January 2018, *available at:* https://www.metrans.org/assets/research/MF%201.1g_Location%20of%20warehouses%20and%20environmental%20justice_Final%20Report_021618.pdf, p. 21.
[11] "Warehouses, Pollution, and Social Disparities: An analytical view of the logistics industry's impacts

It is evident that the continued development of industrial warehouses within these communities poses a significant environmental justice challenge. However, the acceleration of warehouse development is only increasing despite the consequences on public health. The Inland Empire alone is adding 10 to 25 million SF of new industrial space each year.[12]

San Bernardino County, the setting of the proposed Project, has long borne a disproportionately high pollution burden compared to the rest of California. When using CalEnviroScreen 4.0, CalEPA's screening tool that ranks each census tract in the State for pollution and socioeconomic vulnerability, we found that the Project's census tract is in the 96th percentile of most polluted census tracts in the State (see excerpt below).[13]



Furthermore, the Data Visualization Tool for Mates V, a monitoring and evaluation study conducted by SCAQMD, demonstrates that the County already exhibits a heightened residential carcinogenic risk from exposure to air toxics.[14] Specifically, the location of the Project site is in the 86th percentile of highest cancer risks in the South Coast Air Basin, with a cancer risk of 552 in one million (see excerpt below).[15]

A-14

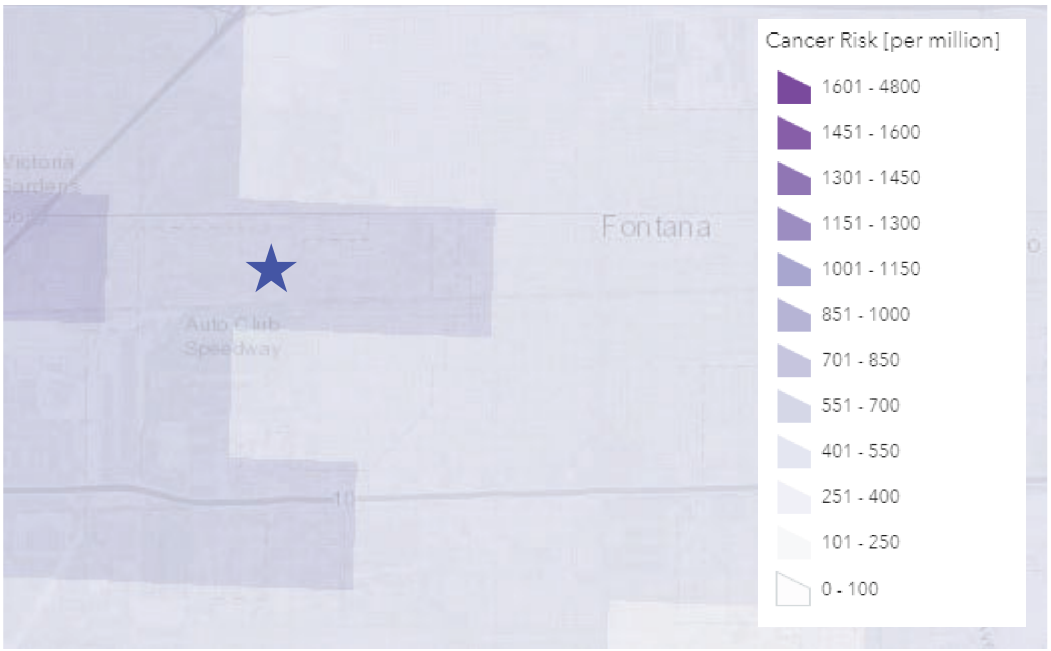
on environmental justice communities across Southern California." People's Collective for Environmental Justice, April 2021, *available at:* https://earthjustice.org/sites/default/files/files/warehouse_research_report_4.15.2021.pdf, p. 4.

[12] "2020 North America Industrial Big Box Review & Outlook." CBRE, 2020, *available at:* https://www.cbre.com/-/media/project/cbre/shared-site/insights/local-responses/industrial-big-box-report-inland-empire/local-response-2020-ibb-inland-empire-overview.pdf, p. 2.

[13] "CalEnviroScreen 4.0." California Office of Environmental Health Hazard Assessment (OEHHA), October 2021, *available at:* https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40, census tract #6071002204.

[14] "Residential Air Toxics Cancer Risk Calculated from Model Data in Grid Cells." MATES V, 2018, *available at:* https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/Main-Page/?views=Click-tabs-for-other-data%2CGridded-Cancer-Risk; see also: "MATES V Multiple Air Toxics Exposure Study." SCAQMD, *available at:* http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v.

[15] "Gridded Cancer Risk." SCAQMD, *available at:* https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/Main-



Therefore, development of the proposed warehouse would disproportionately contribute to and exacerbate the health conditions of the residents in San Bernardino County.

In April 2022, the American Lung Association ranked San Bernadino County as the worst for ozone pollution in the nation.[16] The Los Angeles Times also reported that San Bernardino County had 130 bad air days for ozone pollution in 2020, violating federal health standards on nearly every summer day.[17] Downtown Los Angeles, by comparison, had 22 ozone violation days in 2020. This year, the County continues to face the worst ozone pollution, as it has seen the highest recorded Air Quality Index ("AQI") values for ground-level ozone in California.[18] The U.S. Environmental Protection Agency ("EPA") indicates that ozone, the main ingredient in "smog," can cause several health problems, which includes aggravating lung diseases and increasing the frequency of asthma attacks. The U.S. EPA states:

> "Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure. Children are also more likely than adults to have asthma."[19]

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Page/?data_id=dataSource_112-7c8f2a4db79b4a918d46b4e8985a112b%3A20315&views=Click-tabs-for-other-data%2CGridded-Cancer-Risk

[16] "State of the Air 2022." American Lung Association, April 2022, *available at:* https://www.lung.org/research/sota/key-findings/most-polluted-places.

[17] "Southern California warehouse boom a huge source of pollution. Regulators are fighting back." Los Angeles Times, May 2021, *available at:* https://www.latimes.com/california/story/2021-05-05/air-quality-officials-target-warehouses-bid-to-curb-health-damaging-truck-pollution.

[18] "High Ozone Days." American Lung Association, 2022, *available at:* https://www.lung.org/research/sota/city-rankings/states/california.

[19] "Health Effects of Ozone Pollution." U.S. EPA, May 2021, *available at:* https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution.

Furthermore, regarding the increased sensitivity of early-life exposures to inhaled pollutants, the California Air Resources Board ("CARB") states:

> "Children are often at greater risk from inhaled pollutants, due to the following reasons:
>
> - Children have unique activity patterns and behavior. For example, they crawl and play on the ground, amidst dirt and dust that may carry a wide variety of toxicants. They often put their hands, toys, and other items into their mouths, ingesting harmful substances. Compared to adults, children typically spend more time outdoors and are more physically active. Time outdoors coupled with faster breathing during exercise increases children's relative exposure to air pollution.
>
> - Children are physiologically unique. Relative to body size, children eat, breathe, and drink more than adults, and their natural biological defenses are less developed. The protective barrier surrounding the brain is not fully developed, and children's nasal passages aren't as effective at filtering out pollutants. Developing lungs, immune, and metabolic systems are also at risk.
>
> - Children are particularly susceptible during development. Environmental exposures during fetal development, the first few years of life, and puberty have the greatest potential to influence later growth and development."[20]

A Stanford-led study also reveals that children exposed to high levels of air pollution are more susceptible to respiratory and cardiovascular diseases in adulthood.[21] Thus, given children's higher propensity to succumb to the negative health impacts of air pollutants, and as warehouses release more smog-forming pollution than any other sector, it is necessary to evaluate the specific health risk that warehouses pose to children in the nearby community.

A-14

According to the above-mentioned study by the People's Collective for Environmental Justice and University of Redlands, a half mile radius is more commonly utilized for identifying sensitive receptors. There are 640 schools in the South Coast Air Basin that are located within half a mile of a large warehouse, most of them in socio-economically disadvantaged areas.[22] Regarding the proposed Project itself, the IS/MND states:

[20] "Children and Air Pollution." California Air Resources Board (CARB), *available at:* https://ww2.arb.ca.gov/resources/documents/children-and-air-pollution.
[21] "Air pollution puts children at higher risk of disease in adulthood, according to Stanford researchers and others." Stanford, February 2021, *available at:* https://news.stanford.edu/2021/02/22/air-pollution-impacts-childrens-health/.
[22] "Warehouses, Pollution, and Social Disparities: An analytical view of the logistics industry's impacts on environmental justice communities across Southern California." People's Collective for Environmental Justice, April 2021, *available at:* https://earthjustice.org/sites/default/files/files/warehouse_research_report_4.15.2021.pdf, p. 4.

> "The closest schools to the Project site are Almond Elementary School and Redwood Elementary School located approximately 0.42 miles north of the Project site" (p. 60).

The location of two elementary schools within half of a mile of the Project site poses a significant threat because, as outlined above, children are a vulnerable population that are more susceptible to the damaging side effects of air pollution. As such, the Project would have detrimental short-term and long-term health impacts on local children if approved.

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An EIR should be prepared to evaluate the disproportionate impacts of the proposed warehouse on the community adjacent to the Project, including an analysis of the impact on children and people of color who live and attend school in the surrounding area. Finally, in order to evaluate the cumulative air quality impact from the several warehouse projects proposed or built in a one-mile radius of the Project site, the EIR should prepare a revised cumulative health risk assessment ("HRA") to quantify the adverse health outcome from the effects of exposure to multiple warehouses in the immediate area in conjunction with the poor ambient air quality in the Project's census tract. This recommendation is consistent with guidance provided by the California Department of Justice ("DOJ").[23]

Diesel Particulate Matter Emissions Inadequately Evaluated

The IS/MND concludes that the Project would have a less-than-significant health risk impact without conducting a quantified construction or operational health risk analysis ("HRA"). Regarding the health risk impacts associated with the Project, the IS/MND states:

> "The results of the LST analysis, summarized in Tables E and F, indicate that the proposed Project would not result in an exceedance of a SCAQMD LST during Project construction or operation. Therefore, impacts would be less than significant, and no mitigation is required" (p. 27)

As demonstrated above, the IS/MND concludes a less-than-significant health risk impact as emissions would not exceed SCAQMD's localized thresholds. However, the IS/MND's evaluation of the Project's potential health risk impacts, as well as the subsequent less-than-significant impact conclusion, is incorrect for four reasons.

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First, the use of a LST analysis to determine the health risk impacts posed to nearby, existing sensitive receptors as a result of the Project's operational toxic air contaminant ("TAC") emissions is incorrect. While the LST method assesses the impact of pollutants at a local level, it only evaluates impacts from criteria air pollutants. According to the *Final Localized Significance Threshold Methodology* document prepared by the South Coast Air Quality Management District ("SCAQMD"), LST analyses are only applicable to NO_x, CO, PM_{10}, and $PM_{2.5}$ emissions, which are collectively referred to as criteria air

[23] "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. 6.

pollutants.[24] Because LST methods can only be applied to criteria air pollutants, they cannot be used to determine whether emissions from TACs, specifically Diesel Particulate Matter ("DPM"), a known human carcinogen, would result in a significant health risk impact to nearby sensitive receptors. As a result, health impacts during Project operation from exposure to TACs, such as DPM, were not analyzed, thus leaving a gap in the AQ & GHG Memo's analysis.

Second, by failing to prepare a quantified construction and operational HRA, the Project is inconsistent with CEQA's requirement to make "a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." [25] This poses a problem, as construction of the Project would produce DPM emissions through the exhaust stacks of construction equipment over a duration of approximately 5.5 months (Appendix B, p. 2). Furthermore, according to the IS/MND, the operation of the Project is anticipated to generate 70 daily vehicle trips, which would produce additional exhaust emissions and continue to expose nearby, existing sensitive receptors to DPM emissions (p. 98, Table Q). However, the IS/MND fails to evaluate the TAC emissions associated with Project construction and operation or indicate the concentrations at which such pollutants would trigger adverse health effects. Thus, without making a reasonable effort to connect the Project's TAC emissions to the potential health risks posed to nearby receptors, the IS/MND is inconsistent with CEQA's requirement to correlate Project-generated emissions with potential adverse impacts on human health.

Third, the California DOJ recommends that warehouse projects prepare a quantitative HRA pursuant to the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, as well as local air district guidelines.[26] OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015. This guidance document describes the types of projects that warrant the preparation of an HRA. Specifically, OEHHA recommends that all short-term projects lasting at least 2 months assess cancer risks.[27] Furthermore, according to OEHHA:

> "Exposure from projects lasting more than 6 months should be evaluated for the duration of the project. In all cases, for assessing risk to residential receptors, the exposure should be assumed to start in the third trimester to allow for the use of the ASFs (OEHHA, 2009)."[28]

As the Project's anticipated construction duration exceeds the 2-month and 6-month requirements set forth by OEHHA, construction of the Project meets the threshold warranting a quantified HRA under

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[24] "Final Localized Significance Threshold Methodology." South Coast Air Quality Management District (SCAQMD), Revised July 2008, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf.
[25] "Sierra Club v. County of Fresno." Supreme Court of California, December 2018, a*vailable at:* https://ceqaportal.org/decisions/1907/Sierra%20Club%20v.%20County%20of%20Fresno.pdf.
[26] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice, *available at*: https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/warehouse-best-practices.pdf, p. 6.
[27] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-18.
[28] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-18.

OEHHA guidance and should be evaluated for the entire 5.5-month construction period. Furthermore, OEHHA recommends that an exposure duration of 30 years should be used to estimate the individual cancer risk at the maximally exposed individual resident ("MEIR").[29] While the IS/MND fails to provide the expected lifetime of the proposed Project, we can reasonably assume that the Project would operate for at least 30 years, if not more. Therefore, operation of the Project also exceeds the 2-month and 6-month requirements set forth by OEHHA and should be evaluated for the entire 30-year residential exposure duration, as indicated by OEHHA guidance. These recommendations reflect the most recent state health risk policies, and as such, an EIR should be prepared to include an analysis of health risk impacts posed to nearby sensitive receptors from Project-generated DPM emissions.

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Fourth, by claiming a less-than-significant impact without conducting a quantified construction or operational HRA for nearby, existing sensitive receptors, the IS/MND fails to compare the Project's excess cancer risk to the SCAQMD's specific numeric threshold of 10 in one million.[30] In accordance with the most relevant guidance, an assessment of the health risk posed to nearby, existing receptors as a result of Project construction and operation should be conducted.

Screening-Level Analysis Demonstrates Potentially Significant Health Risk Impact

In order to conduct our screening-level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model.[31] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA and the California Air Pollution Control Officers Associated ("CAPCOA") guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs").[32, 33] A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach should be conducted prior to approval of the Project.

We prepared a preliminary HRA of the Project's construction and operational health risk impact to residential sensitive receptors using the annual PM_{10} exhaust estimates from the IS/MND's CalEEMod output files. Consistent with recommendations set forth by OEHHA, we assumed residential exposure begins during the third trimester stage of life.[34] The IS/MND's CalEEMod model indicates that construction activities will generate approximately 39 pounds of DPM over the 165-day construction

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[29] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 2-4.
[30] "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, March 2023, *available at*: https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25.
[31] "Air Quality Dispersion Modeling - Screening Models," U.S. EPA, *available at:* https://www.epa.gov/scram/air-quality-dispersion-modeling-screening-models.
[32] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.
[33] "Health Risk Assessments for Proposed Land Use Projects." CAPCOA, July 2009, *available at:* http://www.valleyair.org/transportation/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.
[34] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-18.

period.[35] The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project construction, we calculated an average DPM emission rate by the following equation:

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{39\ lbs}{165\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00124\ g/s}$$

Using this equation, we estimated a construction emission rate of 0.00124 grams per second ("g/s"). Subtracting the 165-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 29.5 years. The IS/MND's operational CalEEMod emissions indicate that operational activities will generate approximately 5 pounds of DPM per year throughout operation. Applying the same equation used to estimate the construction DPM rate, we estimated the following emission rate for Project operation:

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{4.58\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.0000659\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.0000659 g/s. Construction and operation were simulated as a 29.5-acre rectangular area source in AERSCREEN, with approximate dimensions of 127- by 64-meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution. The population of Fontana was obtained from U.S. 2020 Census data.[36]

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The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. The United States Environmental Protection Agency ("U.S. EPA") suggests that the annualized average concentration of an air pollutant be estimated by multiplying the single-hour concentration by 10% in screening procedures.[37] According to the IS/MND, the nearest sensitive receptors are residential uses located approximately 100 feet, or 30 meters, from the Project site (p. 27). However, according to the AERSCREEN output files, the Maximally Exposed Individual Receptor ("MEIR") is located approximately 50 meters downwind of the Project site. Thus, the single-hour concentration estimated by AERSCREEN for Project construction is approximately 3.828 µg/m^3 DPM at approximately 50 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.3828 µg/m^3 for Project construction at the MEIR. For Project operation, the single-hour concentration estimated by AERSCREEN is 0.2034 µg/m^3 DPM at

[35] See Attachment C for health risk calculations.
[36] "Fontana." U.S. Census Bureau, 2020, *available at:* https://datacommons.org/place/geoId/0624680.
[37] "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised." U.S. EPA, October 1992, *available at:* https://www.epa.gov/sites/default/files/2020-09/documents/epa-454r-92-019_ocr.pdf.

approximately 50 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.02034 µg/m^3 for Project operation at the MEIR.[38]

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA, as recommended by SCAQMD.[39] Specifically, guidance from OEHHA and CARB recommends the use of a standard point estimate approach, including high-point estimate (i.e. 95th percentile) breathing rates and age sensitivity factors ("ASF") in order to account for the increased sensitivity to carcinogens during early-in-life exposure and accurately assess risk for susceptible subpopulations such as children. The residential exposure parameters utilized for the various age groups in our screening-level HRA are as follows:

Exposure Assumptions for Residential Individual Cancer Risk

Age Group	Breathing Rate (L/kg-day)[40]	Age Sensitivity Factor[41]	Exposure Duration (years)	Fraction of Time at Home[42]	Exposure Frequency (days/year)[43]	Exposure Time (hours/day)
3rd Trimester	361	10	0.25	1	350	24
Infant (0 - 2)	1090	10	2	1	350	24
Child (2 - 16)	572	3	14	1	350	24
Adult (16 - 30)	261	1	14	0.73	350	24

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

[38] See Attachment D for AERSCREEN output files.
[39] "AB 2588 and Rule 1402 Supplemental Guidelines." SCAQMD, October 2020, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf?sfvrsn=19, p. 2.
[40] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act." SCAQMD, October 2020, available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf?sfvrsn=19, p. 19; see also "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.
[41] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-5 Table 8.3.
[42] "Risk Assessment Procedures." SCAQMD, August 2017, available at: http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.
[43] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 5-24.

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

where:

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

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

$$Cancer\ Risk_{AIR} = Dose_{AIR} \times CPF \times ASF \times FAH \times \frac{ED}{AT}$$

where:

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

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Consistent with the 165-day construction schedule, the annualized average concentration for construction was used for the entire third trimester of pregnancy (0.25 years) and the first 0.2 years of the infantile stage of life (0 – 2 years). The annualized average concentration for operation was used for the remainder of the 30-year exposure period, which makes up the latter 1.8 years of the infantile stage of life, as well as the entire child stage of life (2 – 16 years) and the entire adult (16 – 30 years) stage of life. The results of our calculations are shown in the table below.

The Maximally Exposed Individual at an Existing Residential Receptor				
Age Group	**Emissions Source**	**Duration** (years)	**Concentration** (ug/m3)	**Cancer Risk**
3rd Trimester	Construction	0.25	0.3828	5.21E-06
	Construction	*0.20*	*0.3828*	*1.27E-05*
	Operation	*1.80*	*0.0230*	*6.80E-06*
Infant (0 - 2)	Total	2		1.95E-05
Child (2 - 16)	Operation	14	0.0230	8.34E-06
Adult (16 - 30)	Operation	14	0.0230	9.26E-07
Lifetime		**30**		**3.40E-05**

As demonstrated in the table above, the excess cancer risks for the 3rd trimester of pregnancy, infants, children, and adults at the MEIR located approximately 50 meters away, over the course of Project construction and operation, are approximately 5.21, 19.5, 8.34, and 0.926 in one million, respectively. The excess cancer risk over the course of a residential lifetime (30 years) is approximately 34.0 in one million, which exceeds the SCAQMD threshold of 10 in one million and thus results in a potentially significant impact not previously addressed or identified by the IS/MND.

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Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening-level HRA is to demonstrate the potential link between Project-generated emissions and adverse health risk impacts. According to the U.S. EPA:

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

As demonstrated above, screening-level analyses warrant further evaluation in a refined modeling approach. Thus, as our screening-level HRA demonstrates that construction and operation of the Project

could result in a potentially significant health risk impact, an EIR should be prepared to include a refined health risk analysis which adequately and accurately evaluates health risk impacts associated with both Project construction and operation. If the refined analysis similarly concludes that the Project would result in a significant health risk impact, then mitigation measures should be incorporated, as described below in the "Feasible Mitigation Measures Available to Reduce Emissions" section.

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Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The IS/MND estimates that the Project would generate net annual greenhouse gas ("GHG") emissions of 244.3 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year"), which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 53, Table I) (see excerpt below).

Table I: Project Greenhouse Gas Emissions (Metric Tons per Year)

Emission Type	Operational Emissions				
	CO_2	CH_4	N_2O	CO_2e	Percentage of Total
Area Source	<0.1	<0.1	0.0	<0.1	<1
Energy Source	13.3	<0.1	<0.1	13.4	7
Mobile Source	170.0	<0.1	<0.1	175.5	72
Waste Source	7.8	<0.1	0.0	19.4	8
Water Source	22.6	<0.1	<0.1	31.4	13
Total Operational Emissions				**239.7**	**100.0**
Amortized Construction Emissions				**4.6**	**—**
Total Annual Emissions				**244.3**	**—**
SCAQMD Threshold				**3,000**	
Exceeds Threshold?				**No**	

Source: Compiled by LSA (November 2022).

CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
N_2O = nitrous oxide
SCAQMD = South Coast Air Quality Management District

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Furthermore, the IS/MND's analysis relies upon the Project's consistency with San Bernardino County's Greenhouse Gas Reduction Plan, CARB's 2017 Scoping Plan, and the 2020-2045 SCAG RTP/SCS to conclude that the Project would result in a less-than-significant GHG impact (p. 53 – 56). However, the IS/MND's analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for four reasons.

(1) The IS/MND's quantitative GHG analysis relies upon an outdated threshold;
(2) The IS/MND's unsubstantiated air model indicates a potentially significant impact; and
(3) The IS/MND fails to consider performance-based standards under CARB's scoping plan; and
(4) The IS/MND fails to consider performance-based standards under SCAG's *RTP/SCS*.

1) Incorrect Reliance on an Outdated Quantitative GHG Threshold

As previously stated, the IS/MND estimates that the Project would generate net annual GHG emissions of 244.3 MT CO_2e/year, which would not exceed the SCAQMD threshold of 3,000 MT CO_2e/year (p. 53, Table I). However, the guidance that provided the 3,000 MT CO_2e/year threshold, the SCAQMD's 2008 *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans* report, was developed

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when the Global Warming Solutions Act of 2006, commonly known as "AB 32", was the governing statute for GHG reductions in California. AB 32 requires California to reduce GHG emissions to 1990 levels by 2020.[44] Furthermore, AEP guidance states:

> "[F]or evaluating projects with a post 2020 horizon, the threshold will need to be revised based on a new gap analysis that would examine 17 development and reduction potentials out to the next GHG reduction milestone."[45]

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As it is currently April 2023, thresholds for 2020 are not applicable to the proposed Project and should be revised to reflect the current GHG reduction target. As such, the SCAQMD bright-line threshold of 3,000 MT CO_2e/year is outdated and inapplicable to the proposed Project, and the IS/MND's less-than-significant GHG impact conclusion should not be relied upon. Instead, we recommend that the Project apply the SCAQMD 2035 service population efficiency target of 3.0 metric tons of carbon dioxide equivalents per service population per year ("MT CO_2e/SP/year"), which was calculated by applying a 40% reduction to the 2020 targets.[46]

2) Failure to Identify a Potentially Significant GHG Impact

In an effort to quantitatively evaluate the Project's GHG emissions, we compared the Project's GHG emissions, as estimated by the IS/MND, to the SCAQMD 2035 service population efficiency target of 3.0 MT CO_2e/SP/year. When applying this threshold, the Project's air model indicates a potentially significant GHG impact. As previously stated, the IS/MND estimates that the Project would generate net annual GHG emissions of 244.3 MT CO_2e/year (p. 53, Table I). According to CAPCOA's *CEQA & Climate Change* report, a service population ("SP") is defined as "the sum of the number of residents and the number of jobs supported by the project."[47] As the Project does not propose any residential land uses, we estimate that the Project would support 0 residents. Furthermore, according to the IS/MND, the Project would support approximately 20 employees (p. 74). Based on this estimate, we estimate a SP of 20 people.[48] When dividing the Project's net annual GHG emissions, as estimated by the IS/MND, by an SP of 20 people, we find that the Project would emit approximately 8.93 MT CO_2e/SP/year (see table below).[49]

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[44] "Health & Safety Code 38550." California State Legislature, January 2007, *available at:* https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=38550.
[45] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 39.
[46] "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf, p. 2.
[47] "CEQA & Climate Change." CAPCOA, January 2008, *available at:* https://www.placer.ca.gov/DocumentCenter/View/8483/Appendix-B---Attachments-to-the-Center-for-Biological-Diversity-Comment-Letter---Pages-202-through-302-PDF, p. 72.
[48] Calculated: 0 residents + 20 employees = 20 service population.
[49] Calculated: (178.54 MT CO_2e/year) / (20 service population) = (8.93 MT CO_2e/SP/year).

IS/MND Greenhouse Gas Emissions	
Annual Emissions (MT CO_2e/year)	178.54
Service Population	20
Service Population Efficiency (MT CO_2e/SP/year)	8.93
SCAQMD 2035 Threshold	**3.0**
Exceeds?	***Yes***

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As demonstrated above, the Project's service population efficiency value, as estimated by the IS/MND's provided net annual GHG emission estimates and SP, exceeds the SCAQMD 2035 efficiency target of 3.0 MT CO_2e/SP/year, indicating a potentially significant impact not previously identified or addressed by the IS/MND. As a result, the IS/MND's less-than-significant GHG impact conclusion should not be relied upon. An EIR should be prepared, including an updated GHG analysis which incorporates additional mitigation measures to reduce the Project's GHG emissions to less-than-significant levels.

3) Failure to Demonstrate Consistency with CARB's 2017 Scoping Plans

The IS/MND concludes that the Project would be consistent with CARB's 2017 Climate Change Scoping Plan (p. 53 – 56). However, this is incorrect, as the IS/MND fails to consider the following performance-based measures proposed by CARB.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.[50] CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375 as of 2015."[51] By dividing the projected daily VMT by the population, we calculated the daily VMT per capita for each year at the state and county level for 2010 (baseline year), 2023 (Project operational year), and 2030 (target years under SB 32) (see table below).

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[50] "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.
[51] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," California Air Resources Board (CARB), January 2019, *available at*: https://ww2.arb.ca.gov/resources/documents/carb-2017-scoping-plan-identified-vmt-reductions-and-relationship-state-climate; *see also:* https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

2017 Scoping Plan Daily VMT Per Capita						
	San Bernardino County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	2,043,484	55,741,307.23	27.28	37,335,085	836,463,980.46	22.40
2023	2,302,993	62,347,922.72	27.07	41,659,526	924,184,228.61	22.18
2030	2,478,888	65,538,854.28	26.44	43,939,250	957,178,153.19	21.78

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As the IS/MND fails to evaluate the Project's consistency with the CARB 2017 *Scoping Plan* performance-based daily VMT per capita projections, the IS/MND's claim that the proposed Project would not conflict with the CARB 2017 *Scoping Plan* is unsupported. An EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

4) Failure to Consider Performance-based Standards under SCAG's RTP/SCS

As previously discussed, the IS/MND concludes that the Project would be consistent with SCAG's *RTP/SCS* (p. 53 – 56). However, the IS/MND fails to consider whether or not the Project meets any of the specific performance-based goals underlying SCAG's *RTP/SCS* and SB 375, such as: i) per capita GHG emission targets, or ii) daily vehicles miles traveled ("VMT") per capita benchmarks.

i. SB 375 Per Capita GHG Emission Goals

SB 375 was signed into law in September 2008 to enhance the state's ability to reach AB 32 goals by directing CARB to develop regional 2020 and 2035 GHG emission reduction targets for passenger vehicles (autos and light-duty trucks). In March 2018, CARB adopted updated regional targets requiring a 19 percent decrease in VMT for the SCAG region by 2035. This goal is reflected in SCAG's 2020 RTP/SCS Program Environmental Impact Report ("PEIR"), in which the 2020 RTP/SCS PEIR updates the per capita emissions to 18.8 lbs/day in 2035 (see excerpt below).[52]

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[52] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618, p. 3.8-74.

Table 3.8-10
SB 375 Analysis

	2005 (Baseline)	2020 (Plan)	2035 (Plan)
Resident population (per 1,000)	17,161	19,194	21,110
CO2 emissions (per 1,000 tons)	204.0/a/	204.5/b/	198.6/b/
Per capita emissions (pounds/day)	23.8	21.3	18.8
% difference from Plan (2020) to Baseline (2005)			–8%
% difference from Plan (2035) to Baseline (2005)			–19%/c/

Note:
/a/ Based on EMFAC2007
/b/Based on EMFAC2014 and SCAG modeling, 2019.
/c/ Includes off-model adjustments for 2035 and 2045
Source: SCAG modeling, 2019.
http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf

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As the IS/MND fails to evaluate the Project's consistency with the SCAG's per capita emissions, the IS/MND's claim that the proposed Project would be consistent with SCAG's *RTP/SCS* is unsupported. An EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

ii. SB 375 RTP/SCS Daily VMT Per Capita Target

Under the SCAG's 2020 *RTP/SCS*, daily VMT per capita in the SCAG region should decrease from 23.2 VMT in 2016 to 20.7 VMT by 2045.[53] Daily VMT per capita in San Bernardino County should decrease from 26.1 to 24.5 VMT during that same period.[54] Here, however, the IS/MND fails to consider any of the above-mentioned performance-based VMT targets. As the IS/MND fails to evaluate the Project's consistency with the SCAG's performance-based daily VMT per capita projections, the IS/MND's claim that the proposed Project would not conflict with SCAG's *RTP/SCS* is unsupported. An EIR should be prepared to provide additional analysis to adequately support the less-than-significant GHG impact conclusion.

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant air quality, health risk, and GHG impacts that should be mitigated further. To reduce the Project's emissions, we identified the following mitigation measures that are applicable to the proposed Project as found in the California Department of Justice Warehouse Project Best Practices document.[55]

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[53] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.
[54] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.
[55] "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.

- 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.
- 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.

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- 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.
- 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.

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- 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.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently would reduce emissions released during Project construction and operation. A-22

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.

An EIR should be prepared to include all feasible mitigation measures, as well as include updated air quality, health risk, and GHG analyses to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The 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.

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. A-23

Sincerely,

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

Paul E. Rosenfeld, Ph.D.

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

Construction Schedule Calculations					
Phase	Default Phase Length	Construction Duration	%	Construction Duration	Revised Phase Length
Demolition	20	343	0.0583	166	10
Site Preparation	2	343	0.0058	166	1
Grading	4	343	0.0117	166	2
Construction	200	343	0.5831	166	97
Paving	10	343	0.0292	166	5
Architectural Coating	10	343	0.0292	166	5

	Total Default Construction Duration	Revised Construction Duration
Start Date	5/1/2023	5/1/2023
End Date	4/8/2024	10/14/2023
Total Days	343	166

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	41.00	1000sqft	1.25	41,000.00	0
Parking Lot	55.00	Space	0.39	22,000.00	0
City Park	0.36	Acre	0.36	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS/MND's model.

Land Use - Consistent with the IS/MND's model.

Construction Phase - Consistent with the IS/MND's model.

Demolition - Consistent with the IS/MND's model.

Grading - Left as default

Vehicle Trips - Consistent with the IS/MND's model.

Energy Use - Consistent with the IS/MND's model.

Construction Off-road Equipment Mitigation - Consistent with the IS/MND's model.

Area Mitigation - Consistent with the IS/MND's model.

Energy Mitigation - Consistent with the IS/MND's model.

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Water Mitigation - Consistent with the IS/MND's model.

Fleet Mix - Consistent with the IS/MND's model.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

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tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	97.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	4.00	2.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	1.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24NG	1.98	0.00
tblFleetMix	HHD	0.02	0.19
tblFleetMix	LDA	0.54	0.33
tblFleetMix	MH	5.0710e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblLandUse	LandUseSquareFeet	15,681.60	15,000.00
tblLandUse	LotAcreage	0.94	1.25
tblLandUse	LotAcreage	0.49	0.39
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.71
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	1.71
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.71

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

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	tons/yr										MT/yr					
2023	0.2856	0.7072	0.7833	1.5400e-003	0.0340	0.0304	0.0644	0.0112	0.0292	0.0404	0.0000	130.7601	130.7601	0.0201	2.0600e-003	131.8758
Maximum	**0.2856**	**0.7072**	**0.7833**	**1.5400e-003**	**0.0340**	**0.0304**	**0.0644**	**0.0112**	**0.0292**	**0.0404**	**0.0000**	**130.7601**	**130.7601**	**0.0201**	**2.0600e-003**	**131.8758**

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	tons/yr										MT/yr					
2023	0.2480	1.0355	0.8429	1.5400e-003	0.0340	0.0413	0.0752	0.0112	0.0413	0.0525	0.0000	130.7600	130.7600	0.0201	2.0600e-003	131.8757
Maximum	**0.2480**	**1.0355**	**0.8429**	**1.5400e-003**	**0.0340**	**0.0413**	**0.0752**	**0.0112**	**0.0413**	**0.0525**	**0.0000**	**130.7600**	**130.7600**	**0.0201**	**2.0600e-003**	**131.8757**

	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	**13.15**	**-46.41**	**-7.61**	**0.00**	**0.00**	**-35.71**	**-16.89**	**0.00**	**-41.35**	**-29.85**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2023	7-31-2023	0.4669	0.6302
2	8-1-2023	9-30-2023	0.3007	0.4084
		Highest	0.4669	0.6302

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	tons/yr										MT/yr					
Area	0.1691	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	18.2347	18.2347	1.5400e-003	1.9000e-004	18.3287
Mobile	0.0439	0.2498	0.4928	1.7700e-003	0.1173	2.2900e-003	0.1196	0.0317	2.1700e-003	0.0339	0.0000	170.0045	170.0045	7.9300e-003	0.0177	175.4781
Waste						0.0000	0.0000		0.0000	0.0000	7.8294	0.0000	7.8294	0.4627	0.0000	19.3969
Water						0.0000	0.0000		0.0000	0.0000	3.0080	22.7394	25.7474	0.3109	7.5300e-003	35.7622
Total	**0.2130**	**0.2498**	**0.4940**	**1.7700e-003**	**0.1173**	**2.2900e-003**	**0.1196**	**0.0317**	**2.1700e-003**	**0.0339**	**10.8373**	**210.9809**	**221.8183**	**0.7831**	**0.0254**	**248.9685**

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2.2 Overall Operational

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	tons/yr										MT/yr					
Area	0.1691	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	18.2347	18.2347	1.5400e-003	1.9000e-004	18.3287
Mobile	0.0439	0.2498	0.4928	1.7700e-003	0.1173	2.2900e-003	0.1196	0.0317	2.1700e-003	0.0339	0.0000	170.0045	170.0045	7.9300e-003	0.0177	175.4781
Waste						0.0000	0.0000		0.0000	0.0000	7.8294	0.0000	7.8294	0.4627	0.0000	19.3969
Water						0.0000	0.0000		0.0000	0.0000	2.6362	19.9817	22.6179	0.2725	6.6000e-003	31.3952
Total	**0.2130**	**0.2498**	**0.4940**	**1.7700e-003**	**0.1173**	**2.2900e-003**	**0.1196**	**0.0317**	**2.1700e-003**	**0.0339**	**10.4655**	**208.2233**	**218.6888**	**0.7446**	**0.0245**	**244.6015**

	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**	**3.43**	**1.31**	**1.41**	**4.91**	**3.66**	**1.75**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2023	5/12/2023	5	10	
2	Site Preparation	Site Preparation	5/13/2023	5/15/2023	5	1	
3	Grading	Grading	5/16/2023	5/17/2023	5	2	

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4	Building Construction	Building Construction	5/18/2023	9/29/2023	5	97	
5	Paving	Paving	9/30/2023	10/6/2023	5	5	
6	Architectural Coating	Architectural Coating	10/7/2023	10/13/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.94

Acres of Grading (Grading Phase): 2

Acres of Paving: 0.39

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 61,500; Non-Residential Outdoor: 20,500; Striped Parking Area: 1,320 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	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
Demolition	5	13.00	0.00	7.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	33.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3600e-003	0.0716	0.0673	1.2000e-004		3.3800e-003	3.3800e-003		3.1600e-003	3.1600e-003	0.0000	10.5433	10.5433	2.6700e-003	0.0000	10.6101
Total	**7.3600e-003**	**0.0716**	**0.0673**	**1.2000e-004**	**7.5000e-004**	**3.3800e-003**	**4.1300e-003**	**1.1000e-004**	**3.1600e-003**	**3.2700e-003**	**0.0000**	**10.5433**	**10.5433**	**2.6700e-003**	**0.0000**	**10.6101**

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	tons/yr										MT/yr					
Hauling	1.0000e-005	4.1000e-004	1.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1945	0.1945	1.0000e-005	3.0000e-005	0.2039
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	0.0000
Worker	2.3000e-004	1.7000e-004	2.1100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5566	0.5566	1.0000e-005	2.0000e-005	0.5615
Total	**2.4000e-004**	**5.8000e-004**	**2.2300e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**	**7.8000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.7511**	**0.7511**	**2.0000e-005**	**5.0000e-005**	**0.7654**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4300e-003	0.1060	0.0771	1.2000e-004		3.5900e-003	3.5900e-003		3.5900e-003	3.5900e-003	0.0000	10.5433	10.5433	2.6700e-003	0.0000	10.6101
Total	**4.4300e-003**	**0.1060**	**0.0771**	**1.2000e-004**	**7.5000e-004**	**3.5900e-003**	**4.3400e-003**	**1.1000e-004**	**3.5900e-003**	**3.7000e-003**	**0.0000**	**10.5433**	**10.5433**	**2.6700e-003**	**0.0000**	**10.6101**

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	tons/yr										MT/yr					
Hauling	1.0000e-005	4.1000e-004	1.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1945	0.1945	1.0000e-005	3.0000e-005	0.2039
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	0.0000
Worker	2.3000e-004	1.7000e-004	2.1100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5566	0.5566	1.0000e-005	2.0000e-005	0.5615
Total	**2.4000e-004**	**5.8000e-004**	**2.2300e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**	**7.8000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.7511**	**0.7511**	**2.0000e-005**	**5.0000e-005**	**0.7654**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	tons/yr										MT/yr					
Fugitive Dust					3.1300e-003	0.0000	3.1300e-003	1.5000e-003	0.0000	1.5000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7000e-004	6.2100e-003	3.3200e-003	1.0000e-005		2.5000e-004	2.5000e-004		2.3000e-004	2.3000e-004	0.0000	0.7557	0.7557	2.4000e-004	0.0000	0.7618
Total	**5.7000e-004**	**6.2100e-003**	**3.3200e-003**	**1.0000e-005**	**3.1300e-003**	**2.5000e-004**	**3.3800e-003**	**1.5000e-003**	**2.3000e-004**	**1.7300e-003**	**0.0000**	**0.7557**	**0.7557**	**2.4000e-004**	**0.0000**	**0.7618**

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	tons/yr										MT/yr					
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	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	0.0000
Worker	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0343	0.0343	0.0000	0.0000	0.0346
Total	**1.0000e-005**	**1.0000e-005**	**1.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0343**	**0.0343**	**0.0000**	**0.0000**	**0.0346**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	tons/yr										MT/yr					
Fugitive Dust					3.1300e-003	0.0000	3.1300e-003	1.5000e-003	0.0000	1.5000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-004	7.4700e-003	4.9100e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.7557	0.7557	2.4000e-004	0.0000	0.7618
Total	**2.5000e-004**	**7.4700e-003**	**4.9100e-003**	**1.0000e-005**	**3.1300e-003**	**1.9000e-004**	**3.3200e-003**	**1.5000e-003**	**1.9000e-004**	**1.6900e-003**	**0.0000**	**0.7557**	**0.7557**	**2.4000e-004**	**0.0000**	**0.7618**

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	tons/yr										MT/yr					
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	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	0.0000
Worker	1.0000e-005	1.0000e-005	1.3000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0343	0.0343	0.0000	0.0000	0.0346
Total	**1.0000e-005**	**1.0000e-005**	**1.3000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0343**	**0.0343**	**0.0000**	**0.0000**	**0.0346**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	tons/yr										MT/yr					
Fugitive Dust					7.0800e-003	0.0000	7.0800e-003	3.4200e-003	0.0000	3.4200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3300e-003	0.0145	8.7000e-003	2.0000e-005		6.0000e-004	6.0000e-004		5.6000e-004	5.6000e-004	0.0000	1.8104	1.8104	5.9000e-004	0.0000	1.8250
Total	**1.3300e-003**	**0.0145**	**8.7000e-003**	**2.0000e-005**	**7.0800e-003**	**6.0000e-004**	**7.6800e-003**	**3.4200e-003**	**5.6000e-004**	**3.9800e-003**	**0.0000**	**1.8104**	**1.8104**	**5.9000e-004**	**0.0000**	**1.8250**

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	tons/yr										MT/yr					
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	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	0.0000
Worker	3.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0856	0.0856	0.0000	0.0000	0.0864
Total	**3.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0856**	**0.0856**	**0.0000**	**0.0000**	**0.0864**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	tons/yr										MT/yr					
Fugitive Dust					7.0800e-003	0.0000	7.0800e-003	3.4200e-003	0.0000	3.4200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3000e-004	0.0181	0.0121	2.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	1.8104	1.8104	5.9000e-004	0.0000	1.8250
Total	**6.3000e-004**	**0.0181**	**0.0121**	**2.0000e-005**	**7.0800e-003**	**4.9000e-004**	**7.5700e-003**	**3.4200e-003**	**4.9000e-004**	**3.9100e-003**	**0.0000**	**1.8104**	**1.8104**	**5.9000e-004**	**0.0000**	**1.8250**

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	tons/yr										MT/yr					
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	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	0.0000
Worker	3.0000e-005	3.0000e-005	3.3000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0856	0.0856	0.0000	0.0000	0.0864
Total	**3.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0856**	**0.0856**	**0.0000**	**0.0000**	**0.0864**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

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	tons/yr										MT/yr					
Off-Road	0.0739	0.5680	0.6116	1.0700e-003		0.0250	0.0250		0.0241	0.0241	0.0000	88.0756	88.0756	0.0150	0.0000	88.4495
Total	**0.0739**	**0.5680**	**0.6116**	**1.0700e-003**		**0.0250**	**0.0250**		**0.0241**	**0.0241**	**0.0000**	**88.0756**	**88.0756**	**0.0150**	**0.0000**	**88.4495**

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	tons/yr										MT/yr					
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	0.0000
Vendor	7.1000e-004	0.0233	9.4200e-003	1.1000e-004	3.9800e-003	1.7000e-004	4.1400e-003	1.1500e-003	1.6000e-004	1.3100e-003	0.0000	10.9885	10.9885	2.9000e-004	1.6200e-003	11.4796
Worker	5.5800e-003	4.1600e-003	0.0521	1.5000e-004	0.0176	9.0000e-005	0.0176	4.6600e-003	8.0000e-005	4.7400e-003	0.0000	13.7060	13.7060	3.6000e-004	3.7000e-004	13.8258
Total	**6.2900e-003**	**0.0274**	**0.0615**	**2.6000e-004**	**0.0215**	**2.6000e-004**	**0.0218**	**5.8100e-003**	**2.4000e-004**	**6.0500e-003**	**0.0000**	**24.6946**	**24.6946**	**6.5000e-004**	**1.9900e-003**	**25.3055**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

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	tons/yr										MT/yr					
Off-Road	0.0407	0.8405	0.6537	1.0700e-003		0.0355	0.0355		0.0355	0.0355	0.0000	88.0755	88.0755	0.0150	0.0000	88.4494
Total	**0.0407**	**0.8405**	**0.6537**	**1.0700e-003**		**0.0355**	**0.0355**		**0.0355**	**0.0355**	**0.0000**	**88.0755**	**88.0755**	**0.0150**	**0.0000**	**88.4494**

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	tons/yr										MT/yr					
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	0.0000
Vendor	7.1000e-004	0.0233	9.4200e-003	1.1000e-004	3.9800e-003	1.7000e-004	4.1400e-003	1.1500e-003	1.6000e-004	1.3100e-003	0.0000	10.9885	10.9885	2.9000e-004	1.6200e-003	11.4796
Worker	5.5800e-003	4.1600e-003	0.0521	1.5000e-004	0.0176	9.0000e-005	0.0176	4.6600e-003	8.0000e-005	4.7400e-003	0.0000	13.7060	13.7060	3.6000e-004	3.7000e-004	13.8258
Total	**6.2900e-003**	**0.0274**	**0.0615**	**2.6000e-004**	**0.0215**	**2.6000e-004**	**0.0218**	**5.8100e-003**	**2.4000e-004**	**6.0500e-003**	**0.0000**	**24.6946**	**24.6946**	**6.5000e-004**	**1.9900e-003**	**25.3055**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

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	tons/yr										MT/yr					
Off-Road	1.6100e-003	0.0156	0.0220	3.0000e-005		7.7000e-004	7.7000e-004		7.1000e-004	7.1000e-004	0.0000	2.9431	2.9431	9.3000e-004	0.0000	2.9664
Paving	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.1200e-003**	**0.0156**	**0.0220**	**3.0000e-005**		**7.7000e-004**	**7.7000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**2.9431**	**2.9431**	**9.3000e-004**	**0.0000**	**2.9664**

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	tons/yr										MT/yr					
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	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	0.0000
Worker	1.1000e-004	8.0000e-005	1.0600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2783	0.2783	1.0000e-005	1.0000e-005	0.2808
Total	**1.1000e-004**	**8.0000e-005**	**1.0600e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2783**	**0.2783**	**1.0000e-005**	**1.0000e-005**	**0.2808**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

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	tons/yr										MT/yr					
Off-Road	1.3700e-003	0.0294	0.0246	3.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	2.9431	2.9431	9.3000e-004	0.0000	2.9664
Paving	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8800e-003**	**0.0294**	**0.0246**	**3.0000e-005**		**1.0300e-003**	**1.0300e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**2.9431**	**2.9431**	**9.3000e-004**	**0.0000**	**2.9664**

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	tons/yr										MT/yr					
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	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	0.0000
Worker	1.1000e-004	8.0000e-005	1.0600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2783	0.2783	1.0000e-005	1.0000e-005	0.2808
Total	**1.1000e-004**	**8.0000e-005**	**1.0600e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2783**	**0.2783**	**1.0000e-005**	**1.0000e-005**	**0.2808**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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	tons/yr										MT/yr					
Archit. Coating	0.1931					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.1936**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

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	tons/yr										MT/yr					
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	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	0.0000
Worker	6.0000e-005	5.0000e-005	5.7000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1499	0.1499	0.0000	0.0000	0.1512
Total	**6.0000e-005**	**5.0000e-005**	**5.7000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1499**	**0.1499**	**0.0000**	**0.0000**	**0.1512**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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	tons/yr										MT/yr					
Archit. Coating	0.1931					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8000e-004	5.8800e-003	4.5800e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.1934**	**5.8800e-003**	**4.5800e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

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	tons/yr										MT/yr					
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	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	0.0000
Worker	6.0000e-005	5.0000e-005	5.7000e-004	0.0000	1.9000e-004	0.0000	1.9000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1499	0.1499	0.0000	0.0000	0.1512
Total	**6.0000e-005**	**5.0000e-005**	**5.7000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1499**	**0.1499**	**0.0000**	**0.0000**	**0.1512**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	tons/yr										MT/yr					
Mitigated	0.0439	0.2498	0.4928	1.7700e-003	0.1173	2.2900e-003	0.1196	0.0317	2.1700e-003	0.0339	0.0000	170.0045	170.0045	7.9300e-003	0.0177	175.4781
Unmitigated	0.0439	0.2498	0.4928	1.7700e-003	0.1173	2.2900e-003	0.1196	0.0317	2.1700e-003	0.0339	0.0000	170.0045	170.0045	7.9300e-003	0.0177	175.4781

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	70.11	70.11	70.11	300,472	300,472
Total	70.11	70.11	70.11	300,472	300,472

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Parking Lot	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Unrefrigerated Warehouse-No Rail	0.330302	0.055838	0.172353	0.139003	0.027005	0.007196	0.057000	0.186000	0.000000	0.000000	0.025303	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	18.2347	18.2347	1.5400e-003	1.9000e-004	18.3287
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	18.2347	18.2347	1.5400e-003	1.9000e-004	18.3287
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	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	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	tons/yr										MT/yr					
City Park	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	0.0000
Parking Lot	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	0.0000
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	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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	tons/yr										MT/yr					
City Park	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	0.0000
Parking Lot	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	0.0000
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	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**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	7700	1.3656	1.2000e-004	1.0000e-005	1.3726
Unrefrigerated Warehouse-No Rail	95120	16.8691	1.4200e-003	1.7000e-004	16.9561
Total		**18.2347**	**1.5400e-003**	**1.8000e-004**	**18.3287**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	7700	1.3656	1.2000e-004	1.0000e-005	1.3726
Unrefrigerated Warehouse-No Rail	95120	16.8691	1.4200e-003	1.7000e-004	16.9561
Total		**18.2347**	**1.5400e-003**	**1.8000e-004**	**18.3287**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1691	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003
Unmitigated	0.1691	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003

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	tons/yr										MT/yr					
Architectural Coating	0.0193					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1497					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003
Total	**0.1691**	**1.0000e-005**	**1.2300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.3900e-003**	**2.3900e-003**	**1.0000e-005**	**0.0000**	**2.5500e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	tons/yr										MT/yr					
Architectural Coating	0.0193					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1497					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003
Total	**0.1691**	**1.0000e-005**	**1.2300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.3900e-003**	**2.3900e-003**	**1.0000e-005**	**0.0000**	**2.5500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	22.6179	0.2725	6.6000e-003	31.3952
Unmitigated	25.7474	0.3109	7.5300e-003	35.7622

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.428933	0.8451	7.0000e-005	1.0000e-005	0.8495
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	9.48125 / 0	24.9022	0.3108	7.5200e-003	34.9127
Total		**25.7474**	**0.3109**	**7.5300e-003**	**35.7622**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.402768	0.7936	7.0000e-005	1.0000e-005	0.7977
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	8.30937 / 0	21.8243	0.2724	6.5900e-003	30.5975
Total		**22.6179**	**0.2725**	**6.6000e-003**	**31.3952**

8.0 Waste Detail

8.1 Mitigation Measures Waste

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.8294	0.4627	0.0000	19.3969
Unmitigated	7.8294	0.4627	0.0000	19.3969

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	38.54	7.8233	0.4623	0.0000	19.3818
Total		**7.8294**	**0.4627**	**0.0000**	**19.3969**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	38.54	7.8233	0.4623	0.0000	19.3818
Total		**7.8294**	**0.4627**	**0.0000**	**19.3969**

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stewart Almond Warehouse Project

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	41.00	1000sqft	1.25	41,000.00	0
Parking Lot	55.00	Space	0.39	22,000.00	0
City Park	0.36	Acre	0.36	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS/MND's model.

Land Use - Consistent with the IS/MND's model.

Construction Phase - Consistent with the IS/MND's model.

Demolition - Consistent with the IS/MND's model.

Grading - Left as default

Vehicle Trips - Consistent with the IS/MND's model.

Energy Use - Consistent with the IS/MND's model.

Construction Off-road Equipment Mitigation - Consistent with the IS/MND's model.

Fleet Mix - Consistent with the IS/MND's model.

Area Mitigation - Consistent with the IS/MND's model.

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Energy Mitigation - Consistent with the IS/MND's model.

Water Mitigation - Consistent with the IS/MND's model.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	4.00	2.00
tblConstructionPhase	NumDays	200.00	97.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	10.00	5.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24NG	1.98	0.00
tblFleetMix	HHD	0.02	0.19
tblFleetMix	LDA	0.54	0.33
tblFleetMix	MH	5.0710e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblLandUse	LandUseSquareFeet	15,681.60	15,000.00
tblLandUse	LotAcreage	0.94	1.25
tblLandUse	LotAcreage	0.49	0.39
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.71
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	1.71
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.71

2.0 Emissions Summary

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					
2023	77.4567	14.4912	14.0469	0.0277	7.1944	0.6782	7.7993	3.4544	0.6342	4.0109	0.0000	2,588.4319	2,588.4319	0.6479	0.0448	2,610.6362
Maximum	**77.4567**	**14.4912**	**14.0469**	**0.0277**	**7.1944**	**0.6782**	**7.7993**	**3.4544**	**0.6342**	**4.0109**	**0.0000**	**2,588.4319**	**2,588.4319**	**0.6479**	**0.0448**	**2,610.6362**

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					
2023	77.3789	21.3130	15.9291	0.0277	7.1944	0.7368	7.6799	3.4544	0.7365	3.9399	0.0000	2,588.4319	2,588.4319	0.6479	0.0448	2,610.6362
Maximum	**77.3789**	**21.3130**	**15.9291**	**0.0277**	**7.1944**	**0.7368**	**7.6799**	**3.4544**	**0.7365**	**3.9399**	**0.0000**	**2,588.4319**	**2,588.4319**	**0.6479**	**0.0448**	**2,610.6362**

	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	**0.10**	**-47.08**	**-13.40**	**0.00**	**0.00**	**-8.64**	**1.53**	**0.00**	**-16.12**	**1.77**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
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	0.2699	1.2920	2.8935	0.0101	0.6563	0.0126	0.6689	0.1770	0.0119	0.1890		1,060.7463	1,060.7463	0.0473	0.1062	1,093.5791
Total	**1.1970**	**1.2921**	**2.9034**	**0.0101**	**0.6563**	**0.0126**	**0.6689**	**0.1770**	**0.0120**	**0.1890**		**1,060.7674**	**1,060.7674**	**0.0474**	**0.1062**	**1,093.6016**

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	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
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	0.2699	1.2920	2.8935	0.0101	0.6563	0.0126	0.6689	0.1770	0.0119	0.1890		1,060.7463	1,060.7463	0.0473	0.1062	1,093.5791
Total	**1.1970**	**1.2921**	**2.9034**	**0.0101**	**0.6563**	**0.0126**	**0.6689**	**0.1770**	**0.0120**	**0.1890**		**1,060.7674**	**1,060.7674**	**0.0474**	**0.1062**	**1,093.6016**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	Demolition	Demolition	5/1/2023	5/12/2023	5	10	
2	Site Preparation	Site Preparation	5/13/2023	5/15/2023	5	1	
3	Grading	Grading	5/16/2023	5/17/2023	5	2	
4	Building Construction	Building Construction	5/18/2023	9/29/2023	5	97	
5	Paving	Paving	9/30/2023	10/6/2023	5	5	
6	Architectural Coating	Architectural Coating	10/7/2023	10/13/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.94

Acres of Grading (Grading Phase): 2

Acres of Paving: 0.39

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 61,500; Non-Residential Outdoor: 20,500; Striped Parking Area: 1,320 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	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
Demolition	5	13.00	0.00	7.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	33.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

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					
Fugitive Dust					0.1498	0.0000	0.1498	0.0227	0.0000	0.0227			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**0.1498**	**0.6766**	**0.8264**	**0.0227**	**0.6328**	**0.6555**		**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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	1.6900e-003	0.0770	0.0235	3.9000e-004	0.0123	8.1000e-004	0.0131	3.3600e-003	7.7000e-004	4.1400e-003		42.8520	42.8520	1.8300e-003	6.7900e-003	44.9218
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	0.0508	0.0307	0.4902	1.3000e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		132.8169	132.8169	3.1700e-003	3.1200e-003	133.8269
Total	**0.0525**	**0.1077**	**0.5137**	**1.6900e-003**	**0.1576**	**1.5300e-003**	**0.1591**	**0.0419**	**1.4300e-003**	**0.0433**		**175.6689**	**175.6689**	**5.0000e-003**	**9.9100e-003**	**178.7488**

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					
Fugitive Dust					0.1498	0.0000	0.1498	0.0227	0.0000	0.0227			0.0000			0.0000
Off-Road	0.8857	21.2053	15.4154	0.0241		0.7182	0.7182		0.7182	0.7182	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**0.8857**	**21.2053**	**15.4154**	**0.0241**	**0.1498**	**0.7182**	**0.8680**	**0.0227**	**0.7182**	**0.7409**	**0.0000**	**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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	1.6900e-003	0.0770	0.0235	3.9000e-004	0.0123	8.1000e-004	0.0131	3.3600e-003	7.7000e-004	4.1400e-003		42.8520	42.8520	1.8300e-003	6.7900e-003	44.9218
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	0.0508	0.0307	0.4902	1.3000e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		132.8169	132.8169	3.1700e-003	3.1200e-003	133.8269
Total	**0.0525**	**0.1077**	**0.5137**	**1.6900e-003**	**0.1576**	**1.5300e-003**	**0.1591**	**0.0419**	**1.4300e-003**	**0.0433**		**175.6689**	**175.6689**	**5.0000e-003**	**9.9100e-003**	**178.7488**

3.3 Site Preparation - 2023

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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**6.2662**	**0.5074**	**6.7736**	**3.0041**	**0.4668**	**3.4709**		**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	0.0313	0.0189	0.3017	8.0000e-004	0.0894	4.4000e-004	0.0899	0.0237	4.1000e-004	0.0241		81.7335	81.7335	1.9500e-003	1.9200e-003	82.3550
Total	**0.0313**	**0.0189**	**0.3017**	**8.0000e-004**	**0.0894**	**4.4000e-004**	**0.0899**	**0.0237**	**4.1000e-004**	**0.0241**		**81.7335**	**81.7335**	**1.9500e-003**	**1.9200e-003**	**82.3550**

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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	0.4908	14.9460	9.8221	0.0172		0.3747	0.3747		0.3747	0.3747	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**0.4908**	**14.9460**	**9.8221**	**0.0172**	**6.2662**	**0.3747**	**6.6409**	**3.0041**	**0.3747**	**3.3788**	**0.0000**	**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	0.0313	0.0189	0.3017	8.0000e-004	0.0894	4.4000e-004	0.0899	0.0237	4.1000e-004	0.0241		81.7335	81.7335	1.9500e-003	1.9200e-003	82.3550
Total	**0.0313**	**0.0189**	**0.3017**	**8.0000e-004**	**0.0894**	**4.4000e-004**	**0.0899**	**0.0237**	**4.1000e-004**	**0.0241**		**81.7335**	**81.7335**	**1.9500e-003**	**1.9200e-003**	**82.3550**

3.4 Grading - 2023

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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	0.0391	0.0236	0.3771	1.0000e-003	0.1118	5.5000e-004	0.1123	0.0296	5.1000e-004	0.0302		102.1669	102.1669	2.4400e-003	2.4000e-003	102.9438
Total	**0.0391**	**0.0236**	**0.3771**	**1.0000e-003**	**0.1118**	**5.5000e-004**	**0.1123**	**0.0296**	**5.1000e-004**	**0.0302**		**102.1669**	**102.1669**	**2.4400e-003**	**2.4000e-003**	**102.9438**

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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	0.6262	18.1050	12.1450	0.0206		0.4850	0.4850		0.4850	0.4850	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**0.6262**	**18.1050**	**12.1450**	**0.0206**	**7.0826**	**0.4850**	**7.5676**	**3.4247**	**0.4850**	**3.9098**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	0.0391	0.0236	0.3771	1.0000e-003	0.1118	5.5000e-004	0.1123	0.0296	5.1000e-004	0.0302		102.1669	102.1669	2.4400e-003	2.4000e-003	102.9438
Total	**0.0391**	**0.0236**	**0.3771**	**1.0000e-003**	**0.1118**	**5.5000e-004**	**0.1123**	**0.0296**	**5.1000e-004**	**0.0302**		**102.1669**	**102.1669**	**2.4400e-003**	**2.4000e-003**	**102.9438**

3.5 Building Construction - 2023

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					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

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	0.0152	0.4560	0.1913	2.3300e-003	0.0833	3.4300e-003	0.0867	0.0240	3.2800e-003	0.0273		249.4936	249.4936	6.5200e-003	0.0368	260.6360
Worker	0.1290	0.0779	1.2445	3.2900e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		337.1506	337.1506	8.0500e-003	7.9300e-003	339.7145
Total	**0.1443**	**0.5338**	**1.4358**	**5.6200e-003**	**0.4522**	**5.2500e-003**	**0.4574**	**0.1218**	**4.9600e-003**	**0.1268**		**586.6443**	**586.6443**	**0.0146**	**0.0448**	**600.3505**

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					
Off-Road	0.8395	17.3294	13.4786	0.0221		0.7315	0.7315		0.7315	0.7315	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**0.8395**	**17.3294**	**13.4786**	**0.0221**		**0.7315**	**0.7315**		**0.7315**	**0.7315**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

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	0.0152	0.4560	0.1913	2.3300e-003	0.0833	3.4300e-003	0.0867	0.0240	3.2800e-003	0.0273		249.4936	249.4936	6.5200e-003	0.0368	260.6360
Worker	0.1290	0.0779	1.2445	3.2900e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		337.1506	337.1506	8.0500e-003	7.9300e-003	339.7145
Total	**0.1443**	**0.5338**	**1.4358**	**5.6200e-003**	**0.4522**	**5.2500e-003**	**0.4574**	**0.1218**	**4.9600e-003**	**0.1268**		**586.6443**	**586.6443**	**0.0146**	**0.0448**	**600.3505**

3.6 Paving - 2023

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					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.2044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8490**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**		**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

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	0.0508	0.0307	0.4902	1.3000e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		132.8169	132.8169	3.1700e-003	3.1200e-003	133.8269
Total	**0.0508**	**0.0307**	**0.4902**	**1.3000e-003**	**0.1453**	**7.2000e-004**	**0.1460**	**0.0385**	**6.6000e-004**	**0.0392**		**132.8169**	**132.8169**	**3.1700e-003**	**3.1200e-003**	**133.8269**

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					
Off-Road	0.5500	11.7418	9.8512	0.0136		0.4113	0.4113		0.4113	0.4113	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.2044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7543**	**11.7418**	**9.8512**	**0.0136**		**0.4113**	**0.4113**		**0.4113**	**0.4113**	**0.0000**	**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

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	0.0508	0.0307	0.4902	1.3000e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		132.8169	132.8169	3.1700e-003	3.1200e-003	133.8269
Total	**0.0508**	**0.0307**	**0.4902**	**1.3000e-003**	**0.1453**	**7.2000e-004**	**0.1460**	**0.0385**	**6.6000e-004**	**0.0392**		**132.8169**	**132.8169**	**3.1700e-003**	**3.1200e-003**	**133.8269**

3.7 Architectural Coating - 2023

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	77.2376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**77.4293**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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	0.0274	0.0165	0.2640	7.0000e-004	0.0782	3.9000e-004	0.0786	0.0208	3.6000e-004	0.0211		71.5168	71.5168	1.7100e-003	1.6800e-003	72.0607
Total	**0.0274**	**0.0165**	**0.2640**	**7.0000e-004**	**0.0782**	**3.9000e-004**	**0.0786**	**0.0208**	**3.6000e-004**	**0.0211**		**71.5168**	**71.5168**	**1.7100e-003**	**1.6800e-003**	**72.0607**

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	77.2376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**77.3516**	**2.3524**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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	0.0274	0.0165	0.2640	7.0000e-004	0.0782	3.9000e-004	0.0786	0.0208	3.6000e-004	0.0211		71.5168	71.5168	1.7100e-003	1.6800e-003	72.0607
Total	**0.0274**	**0.0165**	**0.2640**	**7.0000e-004**	**0.0782**	**3.9000e-004**	**0.0786**	**0.0208**	**3.6000e-004**	**0.0211**		**71.5168**	**71.5168**	**1.7100e-003**	**1.6800e-003**	**72.0607**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2699	1.2920	2.8935	0.0101	0.6563	0.0126	0.6689	0.1770	0.0119	0.1890		1,060.7463	1,060.7463	0.0473	0.1062	1,093.5791
Unmitigated	0.2699	1.2920	2.8935	0.0101	0.6563	0.0126	0.6689	0.1770	0.0119	0.1890		1,060.7463	1,060.7463	0.0473	0.1062	1,093.5791

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	70.11	70.11	70.11	300,472	300,472
Total	70.11	70.11	70.11	300,472	300,472

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Parking Lot	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unrefrigerated Warehouse-No Rail	0.330302	0.055838	0.172353	0.139003	0.027005	0.007196	0.057000	0.186000	0.000000	0.000000	0.025303	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	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

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
Parking Lot	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
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**

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					
City Park	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
Parking Lot	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
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

No Hearths Installed

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Unmitigated	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225

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	0.1058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8204					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Total	**0.9271**	**9.0000e-005**	**9.8400e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0211**	**0.0211**	**6.0000e-005**		**0.0225**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	0.1058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8204					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Total	**0.9271**	**9.0000e-005**	**9.8400e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0211**	**0.0211**	**6.0000e-005**		**0.0225**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stewart Almond Warehouse Project

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	41.00	1000sqft	1.25	41,000.00	0
Parking Lot	55.00	Space	0.39	22,000.00	0
City Park	0.36	Acre	0.36	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS/MND's model.

Land Use - Consistent with the IS/MND's model.

Construction Phase - Consistent with the IS/MND's model.

Demolition - Consistent with the IS/MND's model.

Grading - Left as default

Vehicle Trips - Consistent with the IS/MND's model.

Energy Use - Consistent with the IS/MND's model.

Construction Off-road Equipment Mitigation - Consistent with the IS/MND's model.

Fleet Mix - Consistent with the IS/MND's model.

Area Mitigation - Consistent with the IS/MND's model.

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Energy Mitigation - Consistent with the IS/MND's model.

Water Mitigation - Consistent with the IS/MND's model.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	4.00	2.00
tblConstructionPhase	NumDays	200.00	97.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	10.00	5.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24NG	1.98	0.00
tblFleetMix	HHD	0.02	0.19
tblFleetMix	LDA	0.54	0.33
tblFleetMix	MH	5.0710e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblLandUse	LandUseSquareFeet	15,681.60	15,000.00
tblLandUse	LotAcreage	0.94	1.25
tblLandUse	LotAcreage	0.49	0.39
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.71
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	1.71
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.71

2.0 Emissions Summary

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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					
2023	77.4557	14.4924	13.8850	0.0274	7.1944	0.6782	7.7993	3.4544	0.6342	4.0109	0.0000	2,557.3363	2,557.3363	0.6479	0.0451	2,579.6496
Maximum	**77.4557**	**14.4924**	**13.8850**	**0.0274**	**7.1944**	**0.6782**	**7.7993**	**3.4544**	**0.6342**	**4.0109**	**0.0000**	**2,557.3363**	**2,557.3363**	**0.6479**	**0.0451**	**2,579.6496**

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					
2023	77.3779	21.3187	15.8428	0.0274	7.1944	0.7368	7.6799	3.4544	0.7365	3.9399	0.0000	2,557.3363	2,557.3363	0.6479	0.0451	2,579.6496
Maximum	**77.3779**	**21.3187**	**15.8428**	**0.0274**	**7.1944**	**0.7368**	**7.6799**	**3.4544**	**0.7365**	**3.9399**	**0.0000**	**2,557.3363**	**2,557.3363**	**0.6479**	**0.0451**	**2,579.6496**

	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	**0.10**	**-47.10**	**-14.10**	**0.00**	**0.00**	**-8.64**	**1.53**	**0.00**	**-16.13**	**1.77**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
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	0.2406	1.3671	2.6144	9.7000e-003	0.6563	0.0126	0.6689	0.1770	0.0120	0.1890		1,024.3182	1,024.3182	0.0476	0.1070	1,057.4058
Total	**1.1677**	**1.3672**	**2.6243**	**9.7000e-003**	**0.6563**	**0.0126**	**0.6689**	**0.1770**	**0.0120**	**0.1890**		**1,024.3393**	**1,024.3393**	**0.0477**	**0.1070**	**1,057.4282**

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	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
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	0.2406	1.3671	2.6144	9.7000e-003	0.6563	0.0126	0.6689	0.1770	0.0120	0.1890		1,024.3182	1,024.3182	0.0476	0.1070	1,057.4058
Total	**1.1677**	**1.3672**	**2.6243**	**9.7000e-003**	**0.6563**	**0.0126**	**0.6689**	**0.1770**	**0.0120**	**0.1890**		**1,024.3393**	**1,024.3393**	**0.0477**	**0.1070**	**1,057.4282**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	Demolition	Demolition	5/1/2023	5/12/2023	5	10	
2	Site Preparation	Site Preparation	5/13/2023	5/15/2023	5	1	
3	Grading	Grading	5/16/2023	5/17/2023	5	2	
4	Building Construction	Building Construction	5/18/2023	9/29/2023	5	97	
5	Paving	Paving	9/30/2023	10/6/2023	5	5	
6	Architectural Coating	Architectural Coating	10/7/2023	10/13/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.94

Acres of Grading (Grading Phase): 2

Acres of Paving: 0.39

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 61,500; Non-Residential Outdoor: 20,500; Striped Parking Area: 1,320 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	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
Demolition	5	13.00	0.00	7.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	33.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

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					
Fugitive Dust					0.1498	0.0000	0.1498	0.0227	0.0000	0.0227			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**0.1498**	**0.6766**	**0.8264**	**0.0227**	**0.6328**	**0.6555**		**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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	1.5600e-003	0.0812	0.0239	3.9000e-004	0.0123	8.1000e-004	0.0131	3.3600e-003	7.8000e-004	4.1400e-003		42.9167	42.9167	1.8200e-003	6.8000e-003	44.9894
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	0.0490	0.0323	0.4035	1.1800e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		120.3288	120.3288	3.1800e-003	3.2200e-003	121.3688
Total	**0.0505**	**0.1134**	**0.4274**	**1.5700e-003**	**0.1576**	**1.5300e-003**	**0.1591**	**0.0419**	**1.4400e-003**	**0.0433**		**163.2454**	**163.2454**	**5.0000e-003**	**0.0100**	**166.3582**

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					
Fugitive Dust					0.1498	0.0000	0.1498	0.0227	0.0000	0.0227			0.0000			0.0000
Off-Road	0.8857	21.2053	15.4154	0.0241		0.7182	0.7182		0.7182	0.7182	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**0.8857**	**21.2053**	**15.4154**	**0.0241**	**0.1498**	**0.7182**	**0.8680**	**0.0227**	**0.7182**	**0.7409**	**0.0000**	**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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	1.5600e-003	0.0812	0.0239	3.9000e-004	0.0123	8.1000e-004	0.0131	3.3600e-003	7.8000e-004	4.1400e-003		42.9167	42.9167	1.8200e-003	6.8000e-003	44.9894
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	0.0490	0.0323	0.4035	1.1800e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		120.3288	120.3288	3.1800e-003	3.2200e-003	121.3688
Total	**0.0505**	**0.1134**	**0.4274**	**1.5700e-003**	**0.1576**	**1.5300e-003**	**0.1591**	**0.0419**	**1.4400e-003**	**0.0433**		**163.2454**	**163.2454**	**5.0000e-003**	**0.0100**	**166.3582**

3.3 Site Preparation - 2023

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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**6.2662**	**0.5074**	**6.7736**	**3.0041**	**0.4668**	**3.4709**		**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	0.0301	0.0199	0.2483	7.2000e-004	0.0894	4.4000e-004	0.0899	0.0237	4.1000e-004	0.0241		74.0485	74.0485	1.9500e-003	1.9800e-003	74.6885
Total	**0.0301**	**0.0199**	**0.2483**	**7.2000e-004**	**0.0894**	**4.4000e-004**	**0.0899**	**0.0237**	**4.1000e-004**	**0.0241**		**74.0485**	**74.0485**	**1.9500e-003**	**1.9800e-003**	**74.6885**

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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	0.4908	14.9460	9.8221	0.0172		0.3747	0.3747		0.3747	0.3747	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**0.4908**	**14.9460**	**9.8221**	**0.0172**	**6.2662**	**0.3747**	**6.6409**	**3.0041**	**0.3747**	**3.3788**	**0.0000**	**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

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	0.0301	0.0199	0.2483	7.2000e-004	0.0894	4.4000e-004	0.0899	0.0237	4.1000e-004	0.0241		74.0485	74.0485	1.9500e-003	1.9800e-003	74.6885
Total	**0.0301**	**0.0199**	**0.2483**	**7.2000e-004**	**0.0894**	**4.4000e-004**	**0.0899**	**0.0237**	**4.1000e-004**	**0.0241**		**74.0485**	**74.0485**	**1.9500e-003**	**1.9800e-003**	**74.6885**

3.4 Grading - 2023

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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	0.0377	0.0248	0.3104	9.0000e-004	0.1118	5.5000e-004	0.1123	0.0296	5.1000e-004	0.0302		92.5606	92.5606	2.4400e-003	2.4800e-003	93.3606
Total	**0.0377**	**0.0248**	**0.3104**	**9.0000e-004**	**0.1118**	**5.5000e-004**	**0.1123**	**0.0296**	**5.1000e-004**	**0.0302**		**92.5606**	**92.5606**	**2.4400e-003**	**2.4800e-003**	**93.3606**

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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	0.6262	18.1050	12.1450	0.0206		0.4850	0.4850		0.4850	0.4850	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**0.6262**	**18.1050**	**12.1450**	**0.0206**	**7.0826**	**0.4850**	**7.5676**	**3.4247**	**0.4850**	**3.9098**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

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	0.0377	0.0248	0.3104	9.0000e-004	0.1118	5.5000e-004	0.1123	0.0296	5.1000e-004	0.0302		92.5606	92.5606	2.4400e-003	2.4800e-003	93.3606
Total	**0.0377**	**0.0248**	**0.3104**	**9.0000e-004**	**0.1118**	**5.5000e-004**	**0.1123**	**0.0296**	**5.1000e-004**	**0.0302**		**92.5606**	**92.5606**	**2.4400e-003**	**2.4800e-003**	**93.3606**

3.5 Building Construction - 2023

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					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

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	0.0142	0.4816	0.1972	2.3300e-003	0.0833	3.4400e-003	0.0867	0.0240	3.2900e-003	0.0273		250.0987	250.0987	6.4700e-003	0.0370	261.2738
Worker	0.1243	0.0819	1.0243	2.9800e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		305.4499	305.4499	8.0600e-003	8.1800e-003	308.0900
Total	**0.1385**	**0.5635**	**1.2215**	**5.3100e-003**	**0.4522**	**5.2600e-003**	**0.4574**	**0.1218**	**4.9700e-003**	**0.1268**		**555.5486**	**555.5486**	**0.0145**	**0.0451**	**569.3638**

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					
Off-Road	0.8395	17.3294	13.4786	0.0221		0.7315	0.7315		0.7315	0.7315	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**0.8395**	**17.3294**	**13.4786**	**0.0221**		**0.7315**	**0.7315**		**0.7315**	**0.7315**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

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	0.0142	0.4816	0.1972	2.3300e-003	0.0833	3.4400e-003	0.0867	0.0240	3.2900e-003	0.0273		250.0987	250.0987	6.4700e-003	0.0370	261.2738
Worker	0.1243	0.0819	1.0243	2.9800e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		305.4499	305.4499	8.0600e-003	8.1800e-003	308.0900
Total	**0.1385**	**0.5635**	**1.2215**	**5.3100e-003**	**0.4522**	**5.2600e-003**	**0.4574**	**0.1218**	**4.9700e-003**	**0.1268**		**555.5486**	**555.5486**	**0.0145**	**0.0451**	**569.3638**

3.6 Paving - 2023

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					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.2044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8490**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**		**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

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	0.0490	0.0323	0.4035	1.1800e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		120.3288	120.3288	3.1800e-003	3.2200e-003	121.3688
Total	**0.0490**	**0.0323**	**0.4035**	**1.1800e-003**	**0.1453**	**7.2000e-004**	**0.1460**	**0.0385**	**6.6000e-004**	**0.0392**		**120.3288**	**120.3288**	**3.1800e-003**	**3.2200e-003**	**121.3688**

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					
Off-Road	0.5500	11.7418	9.8512	0.0136		0.4113	0.4113		0.4113	0.4113	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.2044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7543**	**11.7418**	**9.8512**	**0.0136**		**0.4113**	**0.4113**		**0.4113**	**0.4113**	**0.0000**	**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

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	0.0490	0.0323	0.4035	1.1800e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		120.3288	120.3288	3.1800e-003	3.2200e-003	121.3688
Total	**0.0490**	**0.0323**	**0.4035**	**1.1800e-003**	**0.1453**	**7.2000e-004**	**0.1460**	**0.0385**	**6.6000e-004**	**0.0392**		**120.3288**	**120.3288**	**3.1800e-003**	**3.2200e-003**	**121.3688**

3.7 Architectural Coating - 2023

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	77.2376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**77.4293**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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	0.0264	0.0174	0.2173	6.3000e-004	0.0782	3.9000e-004	0.0786	0.0208	3.6000e-004	0.0211		64.7924	64.7924	1.7100e-003	1.7400e-003	65.3524
Total	**0.0264**	**0.0174**	**0.2173**	**6.3000e-004**	**0.0782**	**3.9000e-004**	**0.0786**	**0.0208**	**3.6000e-004**	**0.0211**		**64.7924**	**64.7924**	**1.7100e-003**	**1.7400e-003**	**65.3524**

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	77.2376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**77.3516**	**2.3524**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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	0.0264	0.0174	0.2173	6.3000e-004	0.0782	3.9000e-004	0.0786	0.0208	3.6000e-004	0.0211		64.7924	64.7924	1.7100e-003	1.7400e-003	65.3524
Total	**0.0264**	**0.0174**	**0.2173**	**6.3000e-004**	**0.0782**	**3.9000e-004**	**0.0786**	**0.0208**	**3.6000e-004**	**0.0211**		**64.7924**	**64.7924**	**1.7100e-003**	**1.7400e-003**	**65.3524**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2406	1.3671	2.6144	9.7000e-003	0.6563	0.0126	0.6689	0.1770	0.0120	0.1890		1,024.3182	1,024.3182	0.0476	0.1070	1,057.4058
Unmitigated	0.2406	1.3671	2.6144	9.7000e-003	0.6563	0.0126	0.6689	0.1770	0.0120	0.1890		1,024.3182	1,024.3182	0.0476	0.1070	1,057.4058

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	70.11	70.11	70.11	300,472	300,472
Total	70.11	70.11	70.11	300,472	300,472

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Parking Lot	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unrefrigerated Warehouse-No Rail	0.330302	0.055838	0.172353	0.139003	0.027005	0.007196	0.057000	0.186000	0.000000	0.000000	0.025303	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	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

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
City Park	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
Parking Lot	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
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 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					
City Park	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
Parking Lot	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
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

No Hearths Installed

Stewart Almond Warehouse Project - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Unmitigated	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225

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	0.1058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8204					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Total	**0.9271**	**9.0000e-005**	**9.8400e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0211**	**0.0211**	**6.0000e-005**		**0.0225**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	0.1058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8204					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Total	**0.9271**	**9.0000e-005**	**9.8400e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0211**	**0.0211**	**6.0000e-005**		**0.0225**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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

Construction	
2023	
Annual Emissions (tons/year)	0.0431
Daily Emissions (lbs/day)	0.236164384
Construction Duration (days)	165
Total DPM (lbs)	38.96712329
Total DPM (g)	17675.48712
Start Date	5/1/2023
End Date	10/13/2023
Construction Days	165
Total	
Total DPM (lbs)	38.96712329
Total DPM (g)	17675.48712
Emission Rate (g/s)	0.001239863
Release Height (meters)	3
Total Acreage	2
Max Horizontal (meters)	127.23
Min Horizontal (meters)	63.61
Initial Vertical Dimension (meters)	1.5
Setting	Urban
Population	210,761
Start Date	5/1/2023
End Date	10/13/2023
Total Construction Days	165
Total Years of Construction	0.45
Total Years of Operation	29.55

Operation	
Emission Rate	
Annual Emissions (tons/year)	0.00229
Daily Emissions (lbs/day)	0.012547945
Total DPM (lbs)	4.58
Emission Rate (g/s)	6.58767E-05
Release Height (meters)	3
Total Acreage	2
Max Horizontal (meters)	127.23
Min Horizontal (meters)	63.61
Initial Vertical Dimension (meters)	1.5
Setting	Urban
Population	210,761

AERSCREEN 21112 / AERMOD 21112 03/31/23
12:24:42

TITLE: Stewart Almond, Construction

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

SOURCE EMISSION RATE:	0.124E-02	g/s	0.984E-02	lb/hr
AREA EMISSION RATE:	0.153E-06	g/(s-m2)	0.122E-05	lb/(hr-m2)
AREA HEIGHT:	3.00	meters	9.84	feet
AREA SOURCE LONG SIDE:	127.23	meters	417.42	feet
AREA SOURCE SHORT SIDE:	63.61	meters	208.69	feet
INITIAL VERTICAL DIMENSION:	1.50	meters	4.92	feet
RURAL OR URBAN:	URBAN			
POPULATION:	210761			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

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

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

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

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m3)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	1.000	3.828	0	50.0	WIN

* = worst case diagonal

```
**********  MAKEMET METEOROLOGY PARAMETERS  **********
--------------------------------------------------------------------------------

MIN/MAX TEMPERATURE:    250.0 / 310.0 (K)

MINIMUM WIND SPEED:       0.5 m/s

ANEMOMETER HEIGHT:     10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

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

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

SURFACE FRICTION VELOCITY (U*) NOT ADUSTED


       METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT
       ------------------------------------------------------------

 YR MO DY JDY HR
 -- -- -- --- --
 10 01 10  10 01

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

    HT  REF TA     HT
- - - - - - - - - - -
  10.0   310.0    2.0



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


                    MAXIMUM                             MAXIMUM
           DIST     1-HR CONC                 DIST     1-HR CONC
            (m)      (ug/m3)                   (m)      (ug/m3)
         ---------------------               ---------------------
           1.00     3.012                   2525.00    0.2451E-01
```

25.00	3.455	2550.00	0.2418E-01
50.00	3.828	2575.00	0.2386E-01
75.00	3.475	2600.00	0.2355E-01
100.00	2.092	2625.00	0.2324E-01
125.00	1.524	2650.00	0.2294E-01
150.00	1.179	2675.00	0.2265E-01
175.00	0.9495	2700.00	0.2236E-01
200.00	0.7890	2725.00	0.2208E-01
225.00	0.6701	2750.00	0.2181E-01
250.00	0.5792	2775.00	0.2154E-01
275.00	0.5084	2800.00	0.2128E-01
300.00	0.4506	2825.00	0.2102E-01
325.00	0.4037	2850.00	0.2077E-01
350.00	0.3648	2875.00	0.2052E-01
375.00	0.3319	2900.00	0.2028E-01
400.00	0.3038	2925.00	0.2004E-01
425.00	0.2795	2950.00	0.1981E-01
450.00	0.2586	2975.00	0.1958E-01
475.00	0.2401	3000.00	0.1936E-01
500.00	0.2237	3025.00	0.1914E-01
525.00	0.2092	3050.00	0.1893E-01
550.00	0.1963	3075.00	0.1871E-01
575.00	0.1848	3100.00	0.1851E-01
600.00	0.1744	3125.00	0.1831E-01
625.00	0.1649	3150.00	0.1811E-01
650.00	0.1563	3175.00	0.1791E-01
675.00	0.1484	3200.00	0.1772E-01
700.00	0.1412	3225.00	0.1753E-01
725.00	0.1346	3250.00	0.1735E-01
750.00	0.1285	3275.00	0.1717E-01
775.00	0.1228	3300.00	0.1699E-01
800.00	0.1176	3325.00	0.1682E-01
825.00	0.1128	3350.00	0.1664E-01
850.00	0.1083	3375.00	0.1648E-01
875.00	0.1041	3400.00	0.1631E-01
900.00	0.1001	3425.00	0.1615E-01
925.00	0.9647E-01	3450.00	0.1599E-01
950.00	0.9302E-01	3475.00	0.1583E-01
975.00	0.8979E-01	3500.00	0.1568E-01
1000.00	0.8675E-01	3525.00	0.1552E-01
1025.00	0.8388E-01	3550.00	0.1537E-01
1050.00	0.8117E-01	3575.00	0.1523E-01
1075.00	0.7862E-01	3600.00	0.1508E-01
1100.00	0.7620E-01	3625.00	0.1494E-01
1125.00	0.7390E-01	3650.00	0.1480E-01
1150.00	0.7171E-01	3675.00	0.1466E-01
1175.00	0.6963E-01	3700.00	0.1453E-01
1200.00	0.6795E-01	3724.99	0.1440E-01
1225.00	0.6606E-01	3750.00	0.1426E-01
1250.00	0.6425E-01	3775.00	0.1413E-01

1275.00	0.6253E-01	3800.00	0.1401E-01
1300.00	0.6088E-01	3825.00	0.1388E-01
1325.00	0.5931E-01	3850.00	0.1376E-01
1350.00	0.5781E-01	3875.00	0.1364E-01
1375.00	0.5637E-01	3900.00	0.1352E-01
1400.00	0.5500E-01	3925.00	0.1340E-01
1425.00	0.5368E-01	3950.00	0.1328E-01
1450.00	0.5241E-01	3975.00	0.1317E-01
1475.00	0.5120E-01	4000.00	0.1306E-01
1500.00	0.5003E-01	4025.00	0.1295E-01
1525.00	0.4891E-01	4050.00	0.1284E-01
1550.00	0.4783E-01	4075.00	0.1273E-01
1575.00	0.4679E-01	4100.00	0.1262E-01
1600.00	0.4580E-01	4125.00	0.1252E-01
1625.00	0.4483E-01	4150.00	0.1242E-01
1650.00	0.4390E-01	4175.00	0.1232E-01
1675.00	0.4301E-01	4200.00	0.1222E-01
1700.00	0.4214E-01	4225.00	0.1212E-01
1725.00	0.4131E-01	4250.00	0.1202E-01
1750.00	0.4050E-01	4275.00	0.1192E-01
1775.00	0.3972E-01	4300.00	0.1183E-01
1800.00	0.3897E-01	4325.00	0.1173E-01
1824.99	0.3824E-01	4350.00	0.1164E-01
1850.00	0.3753E-01	4375.00	0.1155E-01
1875.00	0.3685E-01	4400.00	0.1146E-01
1900.00	0.3619E-01	4425.00	0.1137E-01
1924.99	0.3554E-01	4450.00	0.1129E-01
1950.00	0.3492E-01	4475.00	0.1120E-01
1975.00	0.3432E-01	4500.00	0.1111E-01
2000.00	0.3373E-01	4525.00	0.1103E-01
2025.00	0.3316E-01	4550.00	0.1095E-01
2050.00	0.3261E-01	4575.00	0.1087E-01
2075.00	0.3207E-01	4600.00	0.1079E-01
2100.00	0.3155E-01	4625.00	0.1071E-01
2125.00	0.3104E-01	4650.00	0.1063E-01
2150.00	0.3055E-01	4675.00	0.1055E-01
2175.00	0.3007E-01	4700.00	0.1047E-01
2200.00	0.2960E-01	4725.00	0.1040E-01
2225.00	0.2915E-01	4750.00	0.1032E-01
2250.00	0.2870E-01	4775.00	0.1025E-01
2275.00	0.2827E-01	4800.00	0.1018E-01
2300.00	0.2785E-01	4825.00	0.1010E-01
2325.00	0.2744E-01	4850.00	0.1003E-01
2350.00	0.2704E-01	4875.00	0.9962E-02
2375.00	0.2665E-01	4900.00	0.9893E-02
2400.00	0.2628E-01	4924.99	0.9824E-02
2425.00	0.2591E-01	4950.00	0.9756E-02
2450.00	0.2554E-01	4975.00	0.9689E-02
2475.00	0.2519E-01	5000.00	0.9623E-02
2500.00	0.2485E-01		

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

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

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	3.985	3.985	3.985	3.985	N/A
DISTANCE FROM SOURCE	64.00 meters				
IMPACT AT THE AMBIENT BOUNDARY	3.012	3.012	3.012	3.012	N/A
DISTANCE FROM SOURCE	1.00 meters				

TITLE: Stewart Almond, Operations

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

SOURCE EMISSION RATE:	0.659E-04	g/s	0.523E-03	lb/hr
AREA EMISSION RATE:	0.814E-08	g/(s-m2)	0.646E-07	lb/(hr-m2)
AREA HEIGHT:	3.00	meters	9.84	feet
AREA SOURCE LONG SIDE:	127.23	meters	417.42	feet
AREA SOURCE SHORT SIDE:	63.61	meters	208.69	feet
INITIAL VERTICAL DIMENSION:	1.50	meters	4.92	feet
RURAL OR URBAN:	URBAN			
POPULATION:	210761			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

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

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

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

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m3)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	1.000	0.2034	0	50.0	WIN

* = worst case diagonal

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

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

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

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

SURFACE FRICTION VELOCITY (U*) NOT ADUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR	MO	DY	JDY	HR
10	01	10	10	01

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

HT	REF TA	HT
10.0	310.0	2.0

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

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	0.1601	2525.00	0.1302E-02

25.00	0.1836	2550.00	0.1285E-02
50.00	0.2034	2575.00	0.1268E-02
75.00	0.1847	2600.00	0.1251E-02
100.00	0.1111	2625.00	0.1235E-02
125.00	0.8097E-01	2650.00	0.1219E-02
150.00	0.6263E-01	2675.00	0.1203E-02
175.00	0.5045E-01	2700.00	0.1188E-02
200.00	0.4192E-01	2725.00	0.1173E-02
225.00	0.3561E-01	2750.00	0.1159E-02
250.00	0.3077E-01	2775.00	0.1144E-02
275.00	0.2701E-01	2800.00	0.1130E-02
300.00	0.2394E-01	2825.00	0.1117E-02
325.00	0.2145E-01	2850.00	0.1103E-02
350.00	0.1939E-01	2875.00	0.1090E-02
375.00	0.1763E-01	2900.00	0.1077E-02
400.00	0.1614E-01	2925.00	0.1065E-02
425.00	0.1485E-01	2950.00	0.1052E-02
450.00	0.1374E-01	2975.00	0.1040E-02
475.00	0.1276E-01	3000.00	0.1029E-02
500.00	0.1189E-01	3025.00	0.1017E-02
525.00	0.1112E-01	3050.00	0.1006E-02
550.00	0.1043E-01	3075.00	0.9944E-03
575.00	0.9818E-02	3100.00	0.9834E-03
600.00	0.9265E-02	3125.00	0.9727E-03
625.00	0.8761E-02	3150.00	0.9621E-03
650.00	0.8304E-02	3174.99	0.9518E-03
675.00	0.7887E-02	3199.99	0.9416E-03
700.00	0.7503E-02	3225.00	0.9316E-03
725.00	0.7150E-02	3250.00	0.9218E-03
750.00	0.6826E-02	3275.00	0.9122E-03
775.00	0.6526E-02	3300.00	0.9028E-03
800.00	0.6249E-02	3325.00	0.8935E-03
825.00	0.5992E-02	3350.00	0.8844E-03
850.00	0.5752E-02	3375.00	0.8754E-03
875.00	0.5529E-02	3400.00	0.8666E-03
900.00	0.5321E-02	3425.00	0.8580E-03
925.00	0.5126E-02	3450.00	0.8495E-03
950.00	0.4942E-02	3475.00	0.8411E-03
975.00	0.4771E-02	3500.00	0.8329E-03
1000.00	0.4609E-02	3525.00	0.8248E-03
1025.00	0.4457E-02	3550.00	0.8169E-03
1050.00	0.4313E-02	3575.00	0.8091E-03
1075.00	0.4177E-02	3600.00	0.8014E-03
1100.00	0.4049E-02	3625.00	0.7939E-03
1125.00	0.3926E-02	3650.00	0.7864E-03
1150.00	0.3810E-02	3675.00	0.7791E-03
1175.00	0.3700E-02	3700.00	0.7719E-03
1200.00	0.3611E-02	3724.99	0.7649E-03
1225.00	0.3510E-02	3750.00	0.7579E-03
1250.00	0.3414E-02	3775.00	0.7510E-03

1275.00	0.3322E-02	3800.00	0.7443E-03
1300.00	0.3235E-02	3825.00	0.7376E-03
1325.00	0.3151E-02	3849.99	0.7311E-03
1350.00	0.3072E-02	3875.00	0.7246E-03
1375.00	0.2995E-02	3900.00	0.7183E-03
1400.00	0.2922E-02	3925.00	0.7120E-03
1425.00	0.2852E-02	3950.00	0.7059E-03
1450.00	0.2785E-02	3975.00	0.6998E-03
1475.00	0.2720E-02	4000.00	0.6938E-03
1500.00	0.2658E-02	4025.00	0.6879E-03
1525.00	0.2599E-02	4050.00	0.6821E-03
1550.00	0.2542E-02	4075.00	0.6764E-03
1575.00	0.2486E-02	4100.00	0.6708E-03
1600.00	0.2433E-02	4125.00	0.6652E-03
1625.00	0.2382E-02	4150.00	0.6598E-03
1650.00	0.2333E-02	4175.00	0.6544E-03
1675.00	0.2285E-02	4200.00	0.6490E-03
1700.00	0.2239E-02	4225.00	0.6438E-03
1725.00	0.2195E-02	4250.00	0.6386E-03
1750.00	0.2152E-02	4275.00	0.6335E-03
1775.00	0.2111E-02	4300.00	0.6285E-03
1800.00	0.2070E-02	4325.00	0.6235E-03
1825.00	0.2032E-02	4350.00	0.6186E-03
1850.00	0.1994E-02	4375.00	0.6138E-03
1875.00	0.1958E-02	4400.00	0.6090E-03
1900.00	0.1923E-02	4425.00	0.6043E-03
1925.00	0.1888E-02	4450.00	0.5997E-03
1950.00	0.1855E-02	4475.00	0.5951E-03
1975.00	0.1823E-02	4500.00	0.5906E-03
2000.00	0.1792E-02	4525.00	0.5861E-03
2025.00	0.1762E-02	4550.00	0.5817E-03
2050.00	0.1733E-02	4575.00	0.5774E-03
2075.00	0.1704E-02	4600.00	0.5731E-03
2100.00	0.1676E-02	4625.00	0.5688E-03
2125.00	0.1649E-02	4650.00	0.5647E-03
2150.00	0.1623E-02	4675.00	0.5605E-03
2175.00	0.1598E-02	4700.00	0.5565E-03
2200.00	0.1573E-02	4725.00	0.5524E-03
2225.00	0.1549E-02	4750.00	0.5485E-03
2250.00	0.1525E-02	4775.00	0.5445E-03
2275.00	0.1502E-02	4800.00	0.5407E-03
2300.00	0.1480E-02	4825.00	0.5368E-03
2325.00	0.1458E-02	4850.00	0.5331E-03
2350.00	0.1437E-02	4875.00	0.5293E-03
2375.00	0.1416E-02	4900.00	0.5256E-03
2400.00	0.1396E-02	4925.00	0.5220E-03
2425.00	0.1376E-02	4950.00	0.5184E-03
2449.99	0.1357E-02	4975.00	0.5148E-03
2475.00	0.1338E-02	5000.00	0.5113E-03
2500.00	0.1320E-02		

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

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

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	0.2117	0.2117	0.2117	0.2117	N/A
DISTANCE FROM SOURCE	64.00 meters				
IMPACT AT THE AMBIENT BOUNDARY	0.1601	0.1601	0.1601	0.1601	N/A
DISTANCE FROM SOURCE	1.00 meters				

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.

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

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

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

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

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

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

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

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.

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

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

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

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

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

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

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

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

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

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

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

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

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

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

Presentations:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Teaching Experience:

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

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

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

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

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

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

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

Academic Grants Awarded:

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

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

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

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

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

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

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

Deposition and/or Trial Testimony:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

RESPONSE TO COMMENT LETTER A – LOZEAU DRURY LLP

Response A-1

This introductory comment is noted. This comment references an analysis conducted by SWAPE on behalf of Supporters Alliance for Environmental Responsibility (SAFER) for the proposed Project. This comment accurately summarizes the description of the Project.

The SWAPE analysis contends that the Project's air quality and greenhouse gas (GHG) emissions were inaccurately analyzed and underestimated and that an Environmental Impact Report (EIR) should be prepared. Comments provided in this letter are further responded to below and demonstrate these comments are unsubstantiated opinion. No additional analysis is warranted and the preparation of an EIR is not required.

Response A-2

This comment is a statement of the commenter's understanding of various requirements under CEQA. The comment is noted, but it does not raise any significant environmental issues related to the proposed Project.

Response A-3

This introductory comment is noted. Comments provided in SWAPE's comment letter are further responded to below.

Response A-4

This comment states that there were various changes to the Project construction schedule entered in CalEEMod and asserts that these changes were not explained in the IS/MND. This comment also asserts that by disproportionately altering and extending some of the individual construction phase lengths without proper justification, the model assumes there are a greater number of days to complete the construction activities required by the prolonged phases resulting in less construction activities required per day and, consequently, less pollutants emitted per day.

As discussed on page 24 of the IS/MND, the construction duration was revised in the California Emissions Estimator Model (CalEEMod) based on the construction schedule established by the Project Applicant, which assumed a 5.5-month construction period with a start date of May 1, 2023, and end date of October 15, 2023. In addition, as described on page 24 of the IS/MND, although the construction schedule utilized in the analysis is now outdated and would begin June 15, 2023, over an approximately 5.5-month duration, the schedule utilized in CalEEMod represents a "worst-case" analysis scenario should construction occur any time after the assumed dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent. In addition, as identified as a footnote to Table C of the IS/MND, the building construction and architectural coating phases may overlap.

Response A-5

This comment states that the proposed Project may exceed the South Coast Air Quality Management District's (SCAQMD) 75 pounds per day threshold for volatile organic compounds (VOC). However, as discussed under Response A-4 above, the Project's construction duration was

based on the Project's 5.5-month construction duration. As identified in Table C of the IS/MND, construction emissions associated with the Project would not exceed the SCAQMD's thresholds for VOC, nitrogen oxides (NO_X), carbon monoxide (CO), sulfur dioxide (SO_X), particulate matter less than 2.5 microns in size ($PM_{2.5}$), and particulate matter less than 10 microns in size (PM_{10}).

In addition, this comment does not provide substantial evidence concerning the existence of a significant environmental impact. As discussed in the CalEEMod User's Guide, pages 30 through 31, the construction tab contains default information obtained from a survey conducted by SCAQMD of construction sites with a range of project types and sizes and provides default construction equipment lists and phase length data based on the total lot acreage of a project. The User's Guide states: "If the user has more detailed site-specific equipment and phase information, the user should override the default values."

The comment fails to provide substantial evidence that this adjustment was improper. The analysis included in the IS/MND properly relied on Project-specific construction phases which accurately reflect the required construction activities necessary for Project buildout. The commenter has not provided any supporting documentation as to why the construction assumptions used in the IS/MND analysis would not be representative of the Project's construction. Thus, the IS/MND's analysis is adequate as presented. No additional analysis is required and the preparation of an EIR is not required.

Response A-6

This comment states that the IS/MND failed to provide a construction or operational health risk assessment (HRA). This comment also asserts that the failure to address potential health-related impacts resulting from the Project's likely air emissions is problematic because operation of construction equipment during construction, as well as truck trips during future operations, will release diesel particulate (DPM) emissions into the air, affecting local and regional air quality. This comment also states that a screening level analysis performed by SWAPE demonstrates a significant health risk.

As discussed on pages 27 and 28 of the IS/MND, a localized significance threshold (LST) analysis was prepared for the proposed Project to evaluate potential ambient concentrations of pollutants to nearby sensitive receptors. Based on the SCAQMD's Final Localized Significance Threshold Methodology [1], SCAQMD staff developed LSTs similar to the regional significance thresholds, that are based on the pounds of emissions per day generated by a proposed project that would cause or contribute to adverse localized air quality impacts. Emissions were assumed to be uniformly distributed across a flat proposed project site over an 8-hour workday. Receptor distances are measured in meters from the proposed Project boundary. The same emissions estimated for regional significance thresholds should be compared to allowable emissions presented in the LST lookup tables for the source/receptor area closest to the proposed Project. Based on the SCAQMD's Methodology, screening procedures are by design conservative; that is, the predicted impacts tend to overestimate the actual impacts. If the predicted impacts are acceptable using the LST approach

[1] South Coast Air Quality Management District (SCAQMD). 2008. *Final Localized Significance Threshold Methodology*. July. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2 (accessed April 2023).

presented, then a more detailed evaluation is not necessary. As identified in Tables E and F of the IS/MND, the proposed Project's on-site maximum localized construction and operational emissions would be below the SCAQMD's localized significance thresholds.

In addition, the SCAQMD *CEQA Air Quality Handbook*[1] states that emissions of toxic air contaminants (TACs) are considered significant if a health risk assessment (HRA) shows an increased risk of greater than 10 in 1 million. The California Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxic Hot Spots Program Risk Assessment Guidelines*[2] has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. In addition, CARB has also identified DPM emitted by off-road, diesel-fueled engines emit DPM as a TAC.[3] As such, the TAC of concern would be DPM associated with the use of diesel engines during Project construction. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM. HRA analyses typically use PM_{10} emissions to represent DPM emissions, consistent with OEHHA guidance. As shown in Table C of the IS/MND, PM_{10} emissions, which are a surrogate for TAC emissions during construction, would be 3.8 pounds per day, which is well below the SCAQMD threshold of 150 pounds per day, indicating that significant mass emissions of PM_{10} would not occur and a significant health risk would also not occur. Additionally, as shown in Table D of the IS/MND, once operational, the proposed Project would result in PM_{10} emissions of 0.7 pounds per day, which is also well below the SCAQMD threshold of 150 pounds per day, indicating that significant mass emissions of PM_{10} would not occur and a significant health risk would also not occur. Therefore, the Project would not expose sensitive receptors to substantial levels of TACs.

In addition, SWAPE used the AERSCREEN model, and claims this is a leading screening-level air quality dispersion model. As described on the U.S. Environmental Protection Agency (USEPA) website (www.epa.gov/scram/air-quality-dispersion-modeling-screening-models) "AERSCREEN is intended to produce concentration estimates that are equal to or greater than the estimates produced by AERMOD with a fully developed set of meteorological and terrain data, but the degree of conservatism will vary depending on the application." The SWAPE screening-level HRA is overly simplistic and conservative, deliberately over-estimating the health risk levels.

Response A-7

This comment states that the IS/MND fails to adequately consider the Project's cumulative air quality impacts due to the Project's location within the 96th percentile of most polluted census tracts in California.

Although the Project site has a pollution burden percentile of 96[4], there is no methodology to quantify the cumulative areawide or localized health risks within a community-wide area. The

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1 SCAQMD. 1993. *CEQA Air Quality Handbook* (currently under revision).

2 California Office of Environmental Health Hazard Assessment (OEHHA). 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. March. Website: https://oehha ca.gov/air/air-toxics-hot-spots (accessed April 2023).

3 California Air Resources Board (CARB). 2022. *Proposed Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation.* November 17. Website: https://ww2.arb.ca.gov/sites/default/files/barcu/board/ res/2022/res22-19.pdf (accessed April 2023).

4 OEHHA. 2021. *CalEnviroScreen 4.0.* Website: https://oehha.ca.gov/calenviroscreen/report/calenviros creen-40 (accessed May 2021).

SCAQMD's recommended thresholds of significance apply to individual development projects and evaluate the incremental increase in emissions from a proposed source. These thresholds do not apply to cumulative projects. The County of San Bernardino (County) relies on the SCAQMD's recommended methodology to evaluate cumulative impacts, which is to conclude that an impact, considered to be significant on a project-specific basis, would also cause a significant cumulative impact.

In addition, as described on page 23 of the IS/MND, the South Coast Air Basin (Basin) is currently designated as nonattainment for the federal and State standards for ozone (O_3) and particulate matter of 2.5 microns or less ($PM_{2.5}$). The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, the SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified SCAQMD significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, since a project's individual emissions are not cumulatively considerable, additional analysis to assess cumulative impacts is not necessary.

As shown in Tables C and D of the IS/MND, the proposed Project would generate construction and operational emissions that are below the SCAQMD's thresholds. In addition, as shown in Tables E and F of the IS/MND, the proposed Project would not result in an exceedance of a SCAQMD LST during Project construction or operation. As such, the proposed Project would not result in a cumulative air quality impact.

Response A-8

This comment asserts that the IS/MND relies upon an outdated GHG significance threshold to determine Project significance. This comment states that potential emissions should be measured according to the SCAQMD' 2035 service population efficiency target of 3.0 metric tons (MT) per year of carbon dioxide equivalents (CO_2e) per service population, which was calculated by applying a 40-percent reduction to the 2020 targets.

This comment also claims that the IS/MND incorrectly asserts that the Project will comply with the California Air Resources Board's (CARB) 2017 Scoping Plan and the Southern California Association of Governments' (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). This comment states that the IS/MND fails to consider implementation of performance-based standards under both the CARB Scoping Plan and the RTP/SCS. The commentor asserts that because of these inaccuracies, the models may underestimate the Project's emissions and the IS/MND's quantitative analysis should not be relied upon to determine Project significance.

As discussed on pages 50 and 51 of the IS/MND, in October 2008, the SCAQMD released a *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*[1] that suggested a tiered approach to analyzing GHG emissions in a project-level analysis. In the Draft Guidance Document, SCAQMD provided numerical thresholds that can be applied to smaller projects (like the proposed Project). The interim GHG significance thresholds are 3,000 MT per year of CO_2e for residential and commercial land uses where the SCAQMD is the lead agency.

Based on the last Working Group meeting held in September 2010 (Meeting No. 15), SCAQMD proposed to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. For Tier 3, if GHG emissions are less than the numerical screening-level threshold, project-level and cumulative GHG emissions are less than significant. SCAQMD, proposed a "bright-line" screening-level threshold of 3,000 MT CO_2e per year. The bright-line threshold is based on a review of the Governor's Office of Planning and Research's (OPR) database of CEQA projects. Based on its review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal and therefore less than cumulatively considerable impact on GHG emissions. For Tier 4, if emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold.

Since the proposed Project did not exceed the bright-line numerical threshold, the proposed Project would have a nominal and therefore less than cumulatively considerable impact on GHG emissions. As such, the proposed Project was not compared to the service population threshold.

In addition, the proposed Project was evaluated using the County of San Bernardino's *Greenhouse Gas Emissions Reduction Plan Update* and the GHG Development Review Process for the County. The Development Review Process procedures need to be followed to evaluate GHG impacts and determine significance for CEQA purposes. All projects need to apply the GHG performance standards identified in the Development Review Process and comply with State requirements. Based on the County of San Bernardino's GHG Emissions Development Review Process Screening Tables[2] document, if the GHG emissions from the project are less than 3,000 MT CO_2e per year and the project would apply GHG performance standards and State requirements, project-level and cumulative GHG emissions would be less than significant. As discussed in page 54 of the IS/MND, the Screening Table for Implementing GHG Performance Standards for Commercial Development and Public Facilities was completed for the proposed Project and the proposed Project earned 110 total points. Because the proposed Project would obtain at least 100 points, it would be consistent with the reduction quantities anticipated in the San Bernardino County Regional Greenhouse Gas Reduction Plan. Therefore, the proposed Project would be consistent with the San Bernardino County Regional Greenhouse Gas Reduction Plan, and no additional analysis is required.

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1 SCAQMD. 2008a. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. October. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqasignificance-thresholds/ghgattachmente.pdf (accessed December 2022).

2 County of San Bernardino. 2021. County of San Bernardino Greenhouse Gas Emissions Development Review Process Screening Tables. September.

In addition, as identified above, this comment claims that the IS/MND incorrectly asserts that the Project will comply with CARB's 2017 Scoping Plan and SCAG's 2020-2045 RTP/SCS. As discussed on pages 54 and 55 of the IS/MND, the proposed Project was evaluated for consistency with CARB's 2022 Scoping Plan. As discussed on page 54 of the IS/MND, the 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. As described on page 55 of the IS/MND, the proposed Project would implement the following sustainability features: solar ready roof; tinted windows for energy efficient heating, ventilation, and air conditioning equipment; motion sensors on all lighting with automatic shut off skylights throughout the assembly/warehouse uses; blue box controls per California Green Building Standards Code (CALGreen Code) requirements; low-flow toilets and sinks; and drought-tolerant landscape. Therefore, the proposed Project would comply with applicable energy and water conservation and efficiency measures. Furthermore, as discussed on page 55 of the IS/MND, vehicles traveling to the Project site would be required to comply with emissions reductions standards and, therefore, the proposed Project would not conflict with the identified transportation and motor vehicle measures.

In addition, the CARB's Scoping Plan is applicable to State agencies but is not directly applicable to cities/counties and individual projects (i.e., the Scoping Plan does not require the County to adopt policies, programs, or regulations to reduce GHG emissions). Thus, the performance measures proposed by CARB do not apply to individual development projects. However, new regulations adopted by the State outlined in the 2022 Scoping Plan result in GHG emissions reductions at the local level. As a result, local jurisdictions benefit from reductions in transportation emissions rates, increases in water efficiency in the building and landscape codes, and other statewide actions that would affect a local jurisdiction's emissions inventory from the top down.

As discussed on page 56 of the IS/MND, the forecasted development pattern, when integrated with the financially constrained transportation investments identified in the 2020–2045 RTP/SCS, would reach the regional target of reducing GHG emissions from automobiles and light-duty trucks by 8 percent per capita by 2020 and 19 percent by 2035 (compared to 2005 levels). The proposed Project would not conflict with the stated goals of the RTP/SCS and it can also be assumed that regional mobile emissions would decrease in line with the goals of the RTP/SCS. Furthermore, the proposed Project is not regionally significant per *State CEQA Guidelines* Section 15206, and, as such, it would not conflict with the SCAG's RTP/SCS targets since those targets were established and are applicable on a regional level.

Moreover, as described above, the County of San Bernardino adopted the *Greenhouse Gas Emissions Reduction Plan Update* and the GHG Development Review Process for the County. The Development Review Process procedures need to be followed to evaluate GHG impacts and determine significance for CEQA purposes. All projects need to apply the GHG performance standards identified in the Development Review Process and comply with State requirements. As stated in the County's GHG Emissions Development Review Process Screening Tables[1] document, the County has determined that reducing GHG emissions within the unincorporated County area 40 percent below the 2016 levels of emissions by 2030 matches the State goal outlined in Senate Bill

[1] County of San Bernardino. 2021. op. cit.

(SB) 32 and complements the statewide efforts outlined in the Scoping Plan, and the County's *Greenhouse Gas Emissions Reduction Plan Update* was updated to ensure conformity with the latest State climate change regulations.

CEQA empowers lead agencies to exercise discretion with respect to how to determine whether a project may have a significant effect on the environment (see *State CEQA Guidelines* Section 15064(b)(1)). Thus, through compliance with the County's Development Review Process, the proposed Project has complied with both the County's applicable GHG reduction plan and by extension the Scoping Plan and SCAG's RTP/SCS. No additional analysis is warranted and the preparation of an EIR is not required.

Response A-9

This comment states that the MND for the Project must be withdrawn, and an EIR must be prepared. However, the comment letter does not provide substantial evidence concerning the existence of a significant environmental impact. The comment serves as a conclusion and expresses the opinion of the commenter that an EIR must be prepared. As discussed throughout, the Project was properly modeled and analyzed and the IS/MND appropriately determined that the Project would not generate significant air quality or GHG impacts. The IS/MND's analysis is adequate as provided and impacts to air quality and GHGs would remain unchanged. As such, no additional analysis is warranted and the preparation of an EIR is not required.

Response A-10, SWAPE Attachment

This introductory comment is noted. Comments provided in this letter are further responded to below.

Response A-11, SWAPE Attachment

This comment states that several CalEEMod inputs were not consistent with the information disclosed in the IS/MND and that as a result, the Project's construction emissions are underestimated.

See Response A-4. As discussed on page 24 of the IS/MND, the construction duration was revised in CalEEMod based on the construction schedule established by the Project Applicant, which assumed a 5.5-month construction period with a start date of May 1, 2023, and end date of October 15, 2023. In addition, as described on page 24 of the IS/MND, although the construction schedule utilized in the analysis is now outdated and would begin June 15, 2023, over an approximately 5.5-month duration, the schedule utilized in CalEEMod represents a "worst-case" analysis scenario should construction occur any time after the assumed dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent. In addition, as identified as a footnote to Table C, the building construction and architectural coating phases may overlap.

Response A-12, SWAPE Attachment

This comment states that a review of the CalEEMod output files demonstrates that the model includes several changes to the default individual construction phase lengths and that the model

may underestimate the peak daily emissions associated with some phases of construction and should not be relied upon to determine Project significance.

As discussed under Response A-4 and Response A-5 above, the Project's construction duration was based on the Project's 5.5-month construction duration. As identified in Table C of the IS/MND, construction emissions associated with the Project would not exceed the SCAQMD's thresholds for VOC, NO_X, CO, SO_X, $PM_{2.5}$, and PM_{10}.

In addition, this comment does not provide substantial evidence concerning the existence of a significant environmental impact. As discussed in the CalEEMod User's Guide, pages 30 through 31, the construction tab contains default information obtained from a survey conducted by SCAQMD of construction sites with a range of project types and sizes and provides default construction equipment lists and phase length data based on the total lot acreage of a project. The User's Guide states: "If the user has more detailed site-specific equipment and phase information, the user should override the default values."

The comment fails to provide substantial evidence that this adjustment was improper. The analysis properly relied on Project-specific construction phases that accurately reflect the required construction activities necessary for Project buildout. The commenter has not provided any supporting documentation as to why the construction assumptions used in the IS/MND analysis would not be representative of the Project's construction. Thus, the IS/MND's analysis is adequate as presented. No additional analysis is required, and the preparation of an EIR is not required.

Response A-13, SWAPE Attachment

This comment states that SWAPE prepared an updated CalEEMod model that demonstrates that the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the IS/MND.

The CalEEMod model allows the user to change the default values and shows these changes in the "output files" after the model run. These output files are included as part of the *Air Quality, Greenhouse Gas, and Energy Technical Memorandum* (LSA, January 2023) provided in Appendix B of the IS/MND. CalEEMod was designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence. Substantial evidence is defined in the *State CEQA Guidelines* (Section 15384(b) "facts, reasonable assumptions predicated on facts, and expert opinion supported by facts." The model provides several opportunities for the user to change the defaults in the model; and those changes require users to provide justification for all changes made to the default settings (e.g., reference more appropriate data sources). The assumptions outlined in the *Air Quality, Greenhouse Gas, and Energy Technical Memorandum*, and output files in Appendix B constitute substantial evidence under CEQA that can be used to more accurately estimate project-generated emissions.

Furthermore, SWAPE's efforts to remodel the Project's analysis in its "Updated Analysis," was not necessary since the air quality modeling done for the proposed Project, included in Appendix B of the IS/MND, captured the Project's characteristics and all changes to CalEEMod defaults were substantiated. The commenter's Updated Analysis incorrectly reverted back substantiated changes made to CalEEMod to reflect the Project. As discussed previously in Response A-4 and Response A-5, the Project's construction duration was based on the Project's 5.5-month construction duration. The

comment fails to provide substantial evidence that this adjustment was improper. The analysis properly relied on Project-specific construction phases that accurately reflect the required construction activities necessary for Project buildout. The commenter has not provided any supporting documentation as to why the construction assumptions used in the IS/MND analysis would not be representative of the Project's construction. No additional analysis is warranted and the preparation of an EIR is not required.

Response A-14, SWAPE Attachment

This comment asserts that development of the proposed Project would result in disproportionate health risk impacts on community members living, working, and going to school within the immediate area of the Project site. This comment also references the Project's location within the 96th percentile of most polluted census tracts in California and states that an EIR should be prepared to evaluate the disproportionate impacts of the proposed warehouse on the community adjacent to the Project, including an analysis of the impact on children and people of color who live and attend school in the surrounding area. This comment also states that in order to evaluate the cumulative air quality impact from the several warehouse projects proposed or built within a 1-mile radius of the Project site, the EIR should prepare a revised cumulative HRA to quantify the adverse health outcome from the effects of exposure to multiple warehouses in the immediate area in conjunction with the poor ambient air quality in the Project's census tract.

Refer to Responses A-6 and A-7 above. As discussed in Response A-6, the OEHHA *Air Toxic Hot Spots Program Risk Assessment Guidelines*[1] has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. In addition, CARB has also identified DPM emitted by off-road, diesel-fueled engines that emit DPM as a TAC.[2] As such, the TAC of concern would be DPM associated with the use of diesel engines during Project construction. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM. HRA analyses typically use PM_{10} emissions to represent DPM emissions, consistent with OEHHA guidance. As shown in Table C of the IS/MND, PM_{10} emissions, which are a surrogate for TAC emissions during construction, would be 3.8 pounds per day, which is well below the SCAQMD threshold of 150 pounds per day, indicating that significant mass emissions of PM_{10} would not occur and a significant health risk would also not occur. Additionally, as shown in Table D of the IS/MND, once operational, the proposed Project would result in PM_{10} emissions of 0.7 pounds per day, which is also well below the SCAQMD threshold of 150 pounds per day, indicating that significant mass emissions of PM_{10} would not occur and a significant health risk would also not occur. Therefore, the Project would not expose sensitive receptors to substantial levels of TACs.

In addition, as described above in Response A-7, there is no methodology to quantify the cumulative areawide or localized health risks within a community-wide area. The SCAQMD's recommended thresholds of significance apply to individual development projects and evaluate the incremental increase in emissions from a proposed source. These thresholds do not apply to cumulative projects. The County relies on the SCAQMD's recommended methodology to evaluate cumulative impacts, which is to conclude that an impact, considered to be significant on a project-specific basis, would also cause a significant cumulative impact. As shown in Tables C and D of the IS/MND, the proposed

1 OEHHA. 2015. op. cit.

2 CARB. 2022. op. cit.

Project would generate construction and operational emissions that are below the SCAQMD's thresholds. In addition, as shown in Tables E and F of the IS/MND, the proposed Project would not result in an exceedance of a SCAQMD LST during Project construction or operation. As such, the proposed Project would not result in a cumulative air quality impact.

Response A-15, SWAPE Attachment

This comment states that the IS/MND's use of an LST analysis to determine health risk impacts to sensitive receptors is incorrect and that the IS/MND fails to compare the Project's excess cancer risk to the SCAQMD's numeric threshold of 10 in one million.

As discussed above in Response A-6, an LST analysis was prepared for the proposed Project to evaluate potential ambient concentrations of pollutants to nearby sensitive receptors. Based on the SCAQMD's Final Localized Significance Threshold Methodology[1], SCAQMD staff developed LSTs similar to the regional significance thresholds, that are based on the pounds of emissions per day generated by a proposed project that would cause or contribute to adverse localized air quality impacts. Emissions were assumed to be uniformly distributed across a flat proposed project site over an 8-hour workday. Receptors distances are measured in meters from the proposed Project boundary. The same emissions estimated for regional significance thresholds should be compared to allowable emissions presented in the LST lookup tables for the source/receptor area closest to the proposed Project. Based on the SCAQMD's Methodology, screening procedures are by design conservative; that is, the predicted impacts tend to overestimate the actual impacts. If the predicted impacts are acceptable using the LST approach presented, then a more detailed evaluation is not necessary. As identified in Tables E and F of the IS/MND, the proposed Project's on-site maximum localized construction and operational emissions would be below the SCAQMD localized significance thresholds.

In addition, as described in Response A-6, the TAC of concern would be DPM associated with the use of diesel engines during Project construction. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM. HRA analyses typically use PM_{10} emissions to represent DPM emissions, consistent with OEHHA guidance. As shown in Table C of the IS/MND, PM_{10} emissions, which are a surrogate for TAC emissions during construction, would be 3.8 pounds per day, which is well below the SCAQMD threshold of 150 pounds per day, indicating that significant mass emissions of PM_{10} would not occur and a significant health risk would also not occur. In addition, according to the OEHHA, HRAs, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of the proposed construction activities would only constitute a small percentage of the total 30-year exposure period. Due to this relatively short period of exposure (5.5 months) and minimal particulate emissions on site, TACs generated by the Project would not result in concentrations causing significant health risks.

[1] SCAQMD. 2008b. *Final Localized Significance Threshold Methodology*. July. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2 (accessed April 2023)

Additionally, as shown in Table D of the IS/MND, once operational, the proposed Project would result in PM_{10} emissions of 0.7 pounds per day, which is also well below the SCAQMD threshold of 150 pounds per day, indicating that significant mass emissions of PM_{10} would not occur and a significant health risk would also not occur. Therefore, the Project would not expose sensitive receptors to substantial levels of TACs.

Response A-16, SWAPE Attachment

This comment states that a screening level analysis demonstrates a significant health risk. As identified in Response A-6, SWAPE used AERSCREEN, and claims this is a leading screening-level air quality dispersion model. As described on the USEPA website (www.epa.gov/scram/air-quality-dispersion-modeling-screening-models) "AERSCREEN is intended to produce concentration estimates that are equal to or greater than the estimates produced by AERMOD with a fully developed set of meteorological and terrain data, but the degree of conservatism will vary depending on the application." The SWAPE screening-level HRA is overly simplistic and conservative, deliberately over-estimating the health risk levels.

As such, the AERSCREEN evaluation provides an inaccurate assessment of Project health risks and provides misleading information to the public and decision makers. Furthermore, as identified in Tables E and F of the IS/MND, the IS/MND did evaluate the localized impacts to sensitive receptors from construction and operation activities and found the impacts to be below applicable thresholds for all pollutants. No additional analysis is warranted and the preparation of an EIR is not required.

Response A-17, SWAPE Attachment

This comment asserts that the IS/MND's GHG analysis and less-than-significant impact conclusion is incorrect for four reasons: (1) the IS/MND's quantitative GHG analysis relies upon an outdated threshold; (2) the IS/MND's unsubstantiated air model indicates a potentially significant impact; (3) the IS/MND fails to consider performance-based standards under CARB's Scoping Plan; and (4) the IS/MND fails to consider performance-based standards under SCAG's RTP/SCS.

See Response A-8 above. As discussed on pages 50 and 51 of the IS/MND, in October 2008, the SCAQMD released a D*raft Guidance Document – Interim CEQA GHG Significance Threshold*[1] that suggested a tiered approach to analyzing GHG emissions in a project-level analysis. In the Draft Guidance Document, SCAQMD provided numerical thresholds that can be applied to smaller projects (like the proposed Project). The interim GHG significance thresholds are 3,000 MT per year of CO_2e for residential and commercial land uses where the SCAQMD is the lead agency.

Based on the last Working Group meeting held in September 2010 (Meeting No. 15), SCAQMD proposed to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. For Tier 3, if GHG emissions are less than the numerical screening-level threshold, project-level and cumulative GHG emissions are less than significant. SCAQMD, proposed a "bright-line" screening-level threshold of 3,000 MT CO_2e per year. The bright-line threshold is based on a review of the OPR's database of CEQA projects. Based on its review of 711

[1] SCAQMD. 2008a. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. October. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqasignificance-thresholds/ghgattachmente.pdf (accessed December 2022).

CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal and therefore less than cumulatively considerable impact on GHG emissions. For Tier 4, if emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold.

Since the proposed Project did not exceed the bright-line numerical threshold, the proposed Project would have a nominal and therefore less than cumulatively considerable impact on GHG emissions. As such, the proposed Project was not compared to the service population threshold.

In addition, the proposed Project was evaluated using the County of San Bernardino's *Greenhouse Gas Emissions Reduction Plan Update* and the GHG Development Review Process for the County. The Development Review Process procedures need to be followed to evaluate GHG impacts and determine significance for CEQA purposes. All projects need to apply the GHG performance standards identified in the Development Review Process and comply with State requirements. Based on the County of San Bernardino GHG Emissions Development Review Process Screening Tables[1] document, if the GHG emissions from the project are less than 3,000 MT CO_2e per year and the project would apply GHG performance standards and State requirements, project-level and cumulative GHG emissions would be less than significant. As discussed in page 54 of the IS/MND, the Screening Table for Implementing GHG Performance Standards for Commercial Development and Public Facilities was completed for the proposed Project and the proposed Project earned 110 total points. Because the proposed Project would obtain at least 100 points, it would be consistent with the reduction quantities anticipated in the San Bernardino County Regional Greenhouse Gas Reduction Plan. Therefore, the proposed Project would be consistent with the San Bernardino County Regional Greenhouse Gas Reduction Plan and no additional analysis is required.

Moreover, as stated in the County's GHG Emissions Development Review Process Screening Tables[2] document, the County has determined that reducing GHG emissions within the unincorporated County area 40 percent below the 2016 levels of emissions by 2030 matches the State goal outlined in SB 32 and complements the Statewide efforts outlined in the Scoping Plan, and the County's *Greenhouse Gas Emissions Reduction Plan Update* was updated to ensure conformity with the latest State climate change regulations. Thus, through compliance with the County's Development Review Process, the proposed Project has complied with both the County's applicable GHG reduction plan and by extension the Scoping Plan and SCAG's RTP/SCS.

Since the Project was properly analyzed and the GHG emissions were below the level of significance, then no additional analysis is warranted. As such, the preparation of an EIR is not required.

Response A-18, SWAPE Attachment

This comment claims that the 2020 thresholds are not applicable to the proposed Project and should be revised to reflect the current GHG reduction target. However, as discussed in Response A-8 above, since the proposed Project did not exceed the SCAQMD's 3,000 MT CO_2e bright-line

[1] County of San Bernardino. 2021. op. cit.
[2] County of San Bernardino. 2021. op. cit.

numerical threshold, the proposed Project would have a nominal and therefore less than cumulatively considerable impact on GHG emissions.

In addition, the 3,000 MT CO_2e threshold is consistent with the County's *Greenhouse Gas Emissions Reduction Plan Update* and the GHG Development Review Process for the County. Based on the County of San Bernardino's GHG Emissions Development Review Process Screening Tables[1] document, if the GHG emissions from the project are less than 3,000 MT CO_2e per year and the project would apply GHG performance standards and State requirements, project-level and cumulative GHG emissions would be less than significant. As discussed in page 54 of the IS/MND, the Screening Table for Implementing GHG Performance Standards for Commercial Development and Public Facilities was completed for the proposed Project and the proposed Project earned 110 total points. Because the proposed Project would obtain at least 100 points, it would be consistent with the reduction quantities anticipated in the San Bernardino County Regional Greenhouse Gas Reduction Plan. Therefore, the proposed Project would be consistent with the San Bernardino County Regional Greenhouse Gas Reduction Plan and no additional analysis is required.

CEQA empowers lead agencies to exercise discretion with respect to how to determine whether a project may have a significant effect on the environment (see *State CEQA Guidelines* §15064(b)(1)). Thus, through compliance with the County's Development Review Process, the proposed Project has complied with both the County's applicable GHG reduction plan and by extension the Scoping Plan and SCAG's RTP/SCS. No additional analysis is warranted and the preparation of an EIR is not required.

Response A-19, SWAPE Attachment

This comment incorrectly states that since the proposed Project would result in a service population efficiency of 8.93 MT CO_2e per year per service population, the proposed Project would result in a significant GHG impact.

As discussed in Response A-8 above, he proposed Project did not exceed the SCAQMD's 3,000 MT CO_2e bright-line numerical threshold, the proposed Project would have a nominal and therefore less than cumulatively considerable impact on GHG emissions.

In addition, the 3,000 MT CO_2e threshold is consistent with the County's *Greenhouse Gas Emissions Reduction Plan Update* and the GHG Development Review Process for the County. Based on the County of San Bernardino's GHG Emissions Development Review Process Screening Tables[2] document, if the GHG emissions from the project are less than 3,000 MT CO_2e per year and the project would apply GHG performance standards and State requirements, project-level and cumulative GHG emissions would be less than significant. As discussed in page 54 of the IS/MND, the Screening Table for Implementing GHG Performance Standards for Commercial Development and Public Facilities was completed for the proposed Project and the proposed Project earned 110 total points. Because the proposed Project would obtain at least 100 points, it would be consistent with the reduction quantities anticipated in the San Bernardino County Regional Greenhouse Gas

[1] County of San Bernardino. 2021. op. cit.
[2] County of San Bernardino. 2021. op. cit..

Reduction Plan. Therefore, the proposed Project would be consistent with the San Bernardino County Regional Greenhouse Gas Reduction Plan, and no additional analysis is required.

Response A-20, SWAPE Attachment

This comments states that the IS/MND fails to consider performance-based measures provided by CARB's 2017 Scoping Plan.

As discussed in Response A-8, pages 54 and 55 of the IS/MND identify that the proposed Project was evaluated for consistency with CARB's 2022 Scoping Plan. As discussed on page 54 of the IS/MND, the 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. As described on page 55 of the IS/MND, the proposed Project would implement the following sustainability features: solar ready roof; tinted windows for energy efficient heating, ventilation, and air conditioning equipment; motion sensors on all lighting with automatic shut off skylights throughout the assembly/warehouse uses; blue box controls per CALGreen Code requirements; low-flow toilets and sinks; and drought-tolerant landscape. Therefore, the proposed Project would comply with applicable energy and water conservation and efficiency measures. Furthermore, as discussed on page 55 of the IS/MND, vehicles traveling to the Project site would be required to comply with emissions reductions standards and therefore, the proposed Project would not conflict with the identified transportation and motor vehicle measures.

In addition, the CARB's Scoping Plan is applicable to State agencies but is not directly applicable to cities/counties and individual projects (i.e., the Scoping Plan does not require the County to adopt policies, programs, or regulations to reduce GHG emissions). Thus, the performance measures proposed by CARB do not apply to individual development projects. However, new regulations adopted by the State outlined in the 2022 Scoping Plan result in GHG emissions reductions at the local level. As a result, local jurisdictions benefit from reductions in transportation emissions rates, increases in water efficiency in the building and landscape codes, and other statewide actions that would affect a local jurisdiction's emissions inventory from the top down.

Moreover, as described above, the County of San Bernardino adopted the *Greenhouse Gas Emissions Reduction Plan Update* and the GHG Development Review Process for the County. The Development Review Process procedures need to be followed to evaluate GHG impacts and determine significance for CEQA purposes. All projects need to apply the GHG performance standards identified in the Development Review Process and comply with State requirements. As stated in the County's GHG Emissions Development Review Process Screening Tables[1] document, the County has determined that reducing GHG emissions within the unincorporated County area 40 percent below the 2016 levels of emissions by 2030 matches the State goal outlined in SB 32 and complements the statewide efforts outlined in the Scoping Plan, and the County's *Greenhouse Gas Emissions Reduction Plan Update* was updated to ensure conformity with the latest State climate change regulations. Thus, through compliance with the County's Development Review Process, the proposed Project has complied with both the County's applicable GHG reduction plan and by

[1] County of San Bernardino. 2021. op. cit.

extension the Scoping Plan. No additional analysis is warranted, and the preparation of an EIR is not required.

Response A-21, SWAPE Attachment

This comment states that the IS/MND fails to consider whether or not the Project meets the performance-based goals of SCAG's RTP/SCS.

Refer to Response A-8. As discussed on page 56 of the IS/MND, the forecasted development pattern, when integrated with the financially constrained transportation investments identified in the 2020–2045 RTP/SCS, would reach the regional target of reducing GHG emissions from automobiles and light-duty trucks by 8 percent per capita by 2020 and 19 percent by 2035 (compared to 2005 levels). The proposed Project would not conflict with the stated goals of the RTP/SCS and it can also be assumed that regional mobile emissions would decrease in line with the goals of the RTP/SCS. Furthermore, the proposed Project is not regionally significant per *State CEQA Guidelines* Section 15206, and, as such, it would not conflict with the SCAG RTP/SCS targets since those targets were established and are applicable on a regional level.

Response A-22, SWAPE Attachment

This comment includes a number of mitigation measures to reduce impacts related to air quality, health risk, and GHG emissions. As discussed throughout these responses, and the IS/MND, the Project was properly modeled and analyzed and the IS/MND appropriately determined that the Project would not generate significant air quality or GHG impacts, and CEQA does not require mitigation measures for insignificant impacts. Therefore, since no mitigation is required, then the mitigation listed by the commenter is noted, but is not required to be implemented. The IS/MND's analysis is adequate as provided and impacts to air quality and GHGs would remain unchanged. As such, no additional analysis is warranted, and the preparation of an EIR is not required.

Response A-23, SWAPE Attachment

The commenter does not provide substantial evidence concerning the existence of a significant environmental impact. This comment, which includes a disclaimer is noted. No new environmental issues were raised.

EXHIBIT E

Findings

FINDINGS: POLICY PLAN AND ZONING AMENDMENT.

The following are the required findings, per the San Bernardino County Development Code (Development Code) Section 86.12.060, and supporting facts for the Policy Plan Amendment from Medium Density Residential (MDR) to Limited Industrial (LI) and Zoning Amendment from Multiple Residential) to IC (Community Industrial) for approximately 2.1 acres, located at the southeast corner of Almond Avenue and Arrow Route.

1. The proposed amendment is internally consistent with all other provisions of the Policy Plan.

The Project includes a Policy Plan and Zoning Amendment from Medium Density Residential (MDR) to Community Industrial (IC) and from RM (Multiple Residential) to IC (Community Industrial). Based on the evidence contained in the Project's supporting documents, the Policy Plan and Zoning Amendment are internally consistent with and will further the goals and policies of the Countywide Plan as further indicated below:

Policy LU-1.2 Infill development. We prefer new development to take place on existing vacant and underutilized lots where public services and infrastructure are available.

Consistency. The Project would occur on a 2.1 acre that currently includes a single-family residence on a Multiple Family Zone property. The property is also utilized for the parking of trailer trucks. Water service and improved roadways exist adjacent to the property, and County Fire Station 73 is located approximately 0.75 miles (travel distance) from the property.

Policy LU-2.3 Compatibility with existing uses. We require that new development is located, scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods. We also require that new residential developments are located, scaled, buffered, and designed so as to not hinder the viability and continuity of existing conforming nonresidential development.

Consistency. The Project has incorporated design features and measures to respond to existing and potential site conditions, including providing additional building setbacks from the residential property bordering the easterly property line and a building height of 36' – 6", which is half of the maximum height of 75 feet permitted in the IC Zone and compatible with the adjoining warehouse building to the south.

Policy LU-2.12 Office and industrial development in the Valley region. We encourage office and industrial uses in the unincorporated Valley region in order to promote a countywide jobs-housing balance.

Consistent. The proposed Project represents an expansion of the existing Limited Industrial (LI) Policy Plan Land Use and Community Industrial (IC) Zone located to the south. The LI Land Use and IC Zone covers a substantial area to the south of the Project site and has been expanded north in recent years, such that it fronts along various portions of Arrow Route, particularly between Banana Avenue and Calabash Avenue, east of Cottonwood Avenue, and a portion between Mulberry and Calabash Avenues. This proposed land use change and the prior changes along Arrow Route reflect a migration of employment related land uses and, thus, will enhance local job opportunities and assist in the attainment of a desired jobs-housing balance.

2. **The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or welfare of the County.**

   The proposed Policy Plan and Zoning Amendment was analyzed through the preparation of an Initial Study and found not to have a significant impact on public and emergency vehicle access, public services, or utilities and the Project will not endanger, jeopardize, or otherwise constitute a hazard to the public convenience, health, interest, safety, or welfare, or injurious to the property or improvements in the proposed plan area and its vicinity. The public interest will be served in that the Project will generate increased revenue to the community, due to increased property taxes and payment of the transportation impact fees once future development is constructed. The proposed Project will also promote economic development within the local community, including construction and industrial related jobs, expanding business opportunities, all of which support local businesses and improve the jobs and housing balance and economic diversity in the area. The environmental analysis found the Project would not jeopardize or constitute a hazard to people, property or improvements in the vicinity given that future development will utilize and improve upon existing roadways and services offered to the surrounding area.

3. **The proposed land use category change is in the public interest, there will be a community benefit, and other existing and allowed uses will not be compromised.**

   The Policy Plan and Zoning Amendment will allow for an expansion of the adjacent Industrial land uses, in an area currently characterized by such uses and planned for such in the Countywide Plan.

4. **The proposed land use category change will provide a reasonable and logical extension of the existing land use pattern in the surrounding area.**

   The Policy Plan and Zoning Amendment will serve as an extension of existing Limited Industrial (LI) Land Use District and Community Industrial (IC) Zone to the south and will, therefore, provide a reasonable and logical extension of the existing industrial related land uses occurring in the area.

5. **The proposed land use category change does not conflict with provisions of this Development Code.**

   Future development of the Project site will be required to comply with the requirements of the County Development Code, which will be confirmed by County staff during their review of implementing permits. The Development Code will allow for the continued operations of the existing single-family residence on the property until the warehouse use is constructed.

6. **The proposed land use category change will not have a substantial adverse effect on surrounding property.**

   The proposed Policy Plan and Zoning Amendment has been analyzed and it has been determined through the preparation of an Initial Study and various technical studies to not have a significant impact on the public health, safety, convenience, or welfare of the surrounding properties. Approval of the Amendments will not result in a reduction of public services to properties in the vicinity. Adequate public services and facilities exist or will be required to be upgraded to meet the needs of future development on the property and the proposal will be required to comply with applicable Countywide development standards and

mitigation measures intended to minimize potentially adverse effects upon surrounding properties.

7. **The affected site is physically suitable in terms of design, location, shape, size, operating characteristics, and the provision of public and emergency vehicle (e.g., fire and medical) access and public services and utilities (e.g., fire protection, police protection, potable water, schools, solid waste collection and disposal, storm drainage, wastewater collection, treatment, and disposal, etc.), to ensure that the proposed or anticipated uses and/or development would not endanger, jeopardize, or otherwise constitute a hazard to the property or improvements in the vicinity in which the property is located.**

   The proposed Amendments will not jeopardize or constitute a hazard to property or improvements in the vicinity, given that future development will improve upon the existing roadway system and existing public services. The proposed land use changes will not have a substantial adverse effect on surrounding property, based upon completion of an Initial Study/Mitigated Negative Declaration and will be compatible with the existing and planned land use character of the surrounding area through compliance with County Development Code requirements. The application of existing Development Code requirements to Project development will ensure it will not have a significant impact on public and emergency vehicle access, public services, or utilities or endanger, jeopardize, or otherwise constitute a hazard to the public convenience, health, interest, safety, or welfare, or injurious to the property or improvements in the area.

FINDINGS: CONDITIONAL USE PERMIT.

The following are the required findings, per the San Bernardino County Development Code (Development Code) Section 85.06.040, and supporting facts for the Conditional Use Permit to permit the development of 39,500 square-foot warehouse building on a 2.1 acre parcel, located at the southeast corner of Almond Avenue and Arrow Route:

1. **The site for the proposed use is adequate in terms of shape and size to accommodate the proposed use and all landscaping, loading areas, open spaces, parking areas, setbacks, walls and fences, yards, and other required features pertaining to the application.**

   The proposed Project provides for a 36,500 square-foot warehouse use on a square parcel covering 2.1 acres at the intersection of two paved roadways. The proposed design is consistent with and has exceeded the required amount of landscaping, met the required number of loading and parking spaces, setbacks, and wall locations and height.

2. **The site for the proposed use has adequate legal and physical access which means that the site design incorporates appropriate street and highway characteristics to serve the proposed use.**

   The Project site is located at the corner of Almond Avenue and Arrow Route, both paved roadways. The Project has been conditioned to dedicate additional roadway easements along both roadways and to pave them to provide improvements and an additional travel lane on Arrow Route. The Project has been conditioned to provide for ingress from the southwest corner of the property on Almond Avenue and egress onto Arrow Route from the northeast corner of the property to ensure safe vehicular movement.

3. The proposed use will not have a substantial adverse effect on abutting properties or the allowed use of the abutting properties, which means that the use will not generate excessive noise, traffic, vibration, lighting, glare, or other disturbance.

The Project site abuts a warehouse property to the south and vacant residential land to the east. The proposed building is setback 40 feet from the residentially designated property and a six-foot high block wall and 10 feet of landscaping have been provided to adequately buffer that adjoining property from on-site trucking and assembly activities. An environmental analysis of the proposed Project has been completed and no adverse effects were identified from the proposed operation that would affect adjoining properties. The Project has also been conditioned to comply with general performance standards for glare and lighting, noise, vibration, and other disturbances pursuant to the Development Code.

4. The proposed use and manner of development are consistent with the goals, maps, policies, and standards of the Policy Plan and any applicable Community or Specific Plan.

The proposed Project is consistent with the Policy Plan (CWP) policies and upon adoption of the proposed amendment to the Land Use from MDR to LI, will be consistent with the Land Use District Map. Specifically, the Project is consistent with, but not limited to, the following goal(s) and policies from the CWP:

Policy LU-1.2 Infill development. We prefer new development to take place on existing vacant and underutilized lots where public services and infrastructure are available.

Consistency. The Project would occur on a 2.1-acre parcel that currently includes a single-family residence and the parking of trailer truck on a property zoned multiple family. The use of the single-family residence and trailer parking underutilizes the property under its current land use and zoning designation and approval of the Project would authorize the development of a compatible warehouse building that would be supported by existing services. Water service and improved roadways exist adjacent to the property, and San Bernardino County Fire Protection District, Fire Station 73 is located approximately 0.75 miles (travel distance) from the property.

Policy LU-2.1 Compatibility with existing uses. We require that new development is located, scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods. We also require that new residential developments are located, scaled, buffered, and designed so as to not hinder the viability and continuity of existing conforming nonresidential development.

Consistency. The Project has incorporated design features and measures to respond to existing and potential site conditions, including providing additional building setbacks from the residential property bordering the easterly property line and a building height of 36’ – 6”, which is half of the maximum height of 75 feet permitted in the IC Zone and compatible with the adjoining warehouse building to the south.

Policy LU-2.12 Office and industrial development in the Valley region. We encourage office and industrial uses in the unincorporated Valley region in order to promote a countywide jobs-housing balance.

Consistent. The proposed Project represents an expansion of the existing Limited Industrial (LI) Land Use Category designation and Community Industrial (IC) Zone located to the south. The LI Land Use Category designation and IC Zone designation covers a substantial area to the south of the Project site and has been expanded north in recent years, such that it fronts along various portions of Arrow Route, particularly between Banana Avenue and Calabash Avenue, east of Cottonwood Avenue, and a portion between Mulberry and Calabash Avenues. The Project and the prior changes along Arrow Route reflect a migration of employment related land uses and, thus, will enhance local job opportunities and assist in the attainment of a desired jobs-housing balance.

5. **There is supporting infrastructure, existing or available, consistent with the intensity of the development, to accommodate the proposed Project without significantly lowering service levels.**

   Access to the subject property will occur from adjoining paved roadways that will be further improved to provide additional roadway easement dedication and a travel lane on Arrow Route and additional easement dedication and improvements on Almond Avenue. Water service is available to the property from San Gabriel Valley Water Company and wastewater is to be disposed of on-site utilizing a subsurface septic system.

6. **The lawful conditions stated in the approval are deemed reasonable and necessary to protect the overall public health, safety and general welfare.**

   The Project conditions of approval include measures that require the developer to comply with the general and specific performance measures outlined in the Development Code. The Project has been evaluated by County departments and as part of the environmental review process to respond to specific development needs and reduce potential environmental impacts.

7. **The design of the site has considered the potential for the use of solar energy systems and passive or natural heating and cooling opportunities.**

   The proposed building is available for future use of solar energy systems, if financing feasible and necessary, and be required to comply with the energy requirements of the California Building Code that will enable the use to incorporate appropriate design features that will reduce heating and cooling needs.

ENVIRONMENTAL FINDINGS:

The environmental findings, in accordance with Section 85.03.040 of the San Bernardino County Development Code, are as follows:

Pursuant to provisions of the California Environmental Quality Act (CEQA) and the San Bernardino County Environmental Review guidelines, the above referenced Project has been determined through the preparation of an initial study that it will not have a significant adverse impact on the environment with the implementation of the required mitigation measures. A Mitigated Negative Declaration (MND) will be adopted and a Notice of Determination (NOD) will be filed with the San Bernardino County Clerk's office. The MND represents the independent judgment and analysis of the County acting as lead agency for the Project.

EXHIBIT F

Notice of Determination

Notice of Determination

To:

☒ Office of Planning and Research

U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Rm 113, Sacramento, CA 95814

☒ Clerk of the Board
County of: San Bernardino
Address: 385 North Arrowhead Avenue, Second Floor
San Bernardino, CA 92415-0130

From:

Public Agency: San Bernardino County, LUSD
Address: 385 North Arrowhead Ave, First Floor San Bernardino, CA 92415-0187
Contact: Jim Morrissey
Phone: 909-387-4234

Lead Agency (if different from above):

Address:

Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2023030325

Project Title: Stewart Almond Warehouse Project – PROJ-2022-00147

Project Applicant: Lord Constructors

Project Location (include county): Southeast corner of Almond Avenue and Arrow Route, Fontana, CA

Project Description:

Policy Plan Amendment from Medium Density Residential (MDR) to Limited Industrial (LI); Zoning Amendment from Multiple Residential (RM) to Community Industrial (IC); and Conditional Use Permit for a 39,500 square-foot warehouse building, all on approximately 2.1 acres.

This is to advise that the San Bernardino County has approved the above (☒ Lead Agency or ☐ Responsible Agency)

described project on _____ (date) and has made the following determinations regarding the above described project.

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final and record of project approval are the Mitigated Negative Declaration are available to the General Public at:
385 N. Arrowhead Ave., San Bernardino, CA 92415

Signature (Public Agency): Heidi Duron Title: Planning Director

Date: _____ Date Received for filing at OPR: _____

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code. Revised 2011

EXHIBIT G

Building Renderings


STOP
NO
TRUCK
EXIT