ATTACHMENT NO. 18

PUBLIC COMMENTS RECEIVED

1. BLUM, COLLINS & HO LLP

2. CENTER FOR COMMUNITY ACTION AND ENVIRONMENTAL JUSTICE

3. DEBBIE ASHLEY HEMPHILL

4. PHILIP VIRAMONTES

COMMENT - 1

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March 18, 2024

Irene Romero
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City of Fontana
8353 Sierra Avenue
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VIA EMAIL TO:
iromero@fontanaca.gov

Subject: Comments on Citrus Avenue Industrial Warehouse MND (SCH NO. 2024020971)

Dear Ms. Romero,

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

1.0 Summary

The project proposes the construction of an approximately 355,995 s.f. warehouse building, including 348,995 s.f. of warehouse space and 7,000 s.f. of office space (3,500 sf on the mezzanine level and 3,500 sf on the ground floor) on a 15.84 net acre site. The building proposes 50 truck/trailer loading dock doors (42 on the south side of the building and 8 on the west side of the building), 97 passenger car parking spaces, and 75 truck/trailer parking spaces. Operation of the proposed development is assumed to be operational 24 hours a day, 7 days a week.
Discretionary actions required to implement the project include:

1. General Plan Amendment No. 22-009 to change the land use designation for APN 251-151-10 from Community Commercial to Light Industrial.
2. Zone Change No. 22-009 to change the zoning designation for APN 251-151-10 from Community Commercial to Light Industrial.

3. Design Review Project No. 22-054: Proposal for (1) industrial warehouse building measuring a total of 355,995 SF, that includes 7,000 square foot office of the first floor and 3,500 square foot mezzanine on 21 parcels totaling 16.12 acres.
4. Tentative Parcel Map No. 22-029 - To consolidate 21 parcels into one (1) parcel for the project for the proposal of one (1) industrial warehouse building measuring a total of 355,995 SF. The total acreage will be 16.12 gross acres which will be reduced to 15.84 net acres following street dedication.
5. Environmental No. 22-029 to review the environmental impacts associated the proposed Mitigated Negative Declaration.

2.0 Project Description

The Project Description states that "Preliminary Project site grading is anticipated to require approximately 18,600 cubic yards of cut and 24,000 cubic yards of fill, resulting in the net import of approximately 5,400 cubic yards of soil." There is no mechanism for public verification of this conclusion as a Grading Plan is not included for public review. An EIR must be prepared to include a wholly accurate, detailed, and complete Grading Plan to determine the quantity of soils/materials to be imported/exported from the site. These grading truck hauling trips must be included for all sections of environmental analysis, including but not limited to the Air Quality, Energy, Greenhouse Gas Emissions, and Transportation analysis.

The MND also does not include a detailed floor plan or detailed elevations for the proposed project. The basic components of a Planning Application include a site plan, floor plan, grading plan, elevations, and written narrative. The figure provided by Exhibit 6: Conceptual Site Plan is illegible, blurry, and does not effectively provide any meaningful project information. Exhibit 7: Building Elevations does not list the height of the proposed building. The application items included are not useful for public review and do not satisfy CEQA's requirements for meaningful disclosure and adequate informational documents (CEQA § 15121 and 21003(b)). Incorporation by reference (CEQA § 15150 (f)) is not appropriate as these documents contribute directly to analysis of the problem at hand. An EIR must be prepared to include all of these application items in their unedited and complete form, and recirculated for public review.

Further, the analysis within Table 2.10-5: Benefits of Project Design Features to Comply with Ordinance 1891 is misleading and erroneous. For example, the MND's analysis with the requirement, "Location of Truck Docks 9-71.(f) Unless impossible, docks and truck entries shall be oriented away from abutting sensitive receptors. As best able, docks, truck entries and drive aisles shall be located away from nearby sensitive receptors," states that, "The site plan and layout of the drive aisle and docks shows that both docks are facing away from nearby sensitive receptors

and are being recessed on the western and southern sides of the site, respectively. The trailer stalls area and setbacks of the building from the eastern and southern property lines would also limit noise transmission originating from the docks." This analysis excludes that the truck entry and drive aisles on the east side of the property are immediately adjacent to sensitive receptors. Additionally, the northwest project driveway on Boyle Avenue will be utilized by trucks, and sensitive receptors are located on this portion of Boyle Avenue. The MND has presented a skewed environmental analysis in order to artificially demonstrate compliance with Ordinance 1891 and an EIR must be prepared in order to provide an accurate and adequate environmental analysis.

The Project Description also states that the "Project site is vacant," and the Population and Housing Analysis states that the, "Project site is currently vacant with no housing or other related structures present," to conclude the project will have less than significant impacts to population and housing. The MND excludes from the Project Description and associated analysis that the project site was developed with 15 single family dwellings. According to the City's building permit data portal, building permits (BLD23-002968 through BLD23-002983[1]) were issued to demolish all 15 existing residences on the site with a date of May 8, 2023. This is well after the proposed project was submitted to the City on August 29, 2022 and after environmental analysis commenced. BPC23-000518[2] (Building Plan Check) dated March 9, 2023 indicates that the scope of work included "demolition of existing buildings/structures including foundations, hardscape, existing trees, overhead utilities and septic tanks within the limit of work; to also include removal and cap of all sewer and water lines 5 feet up to the public right of way." This is implementation of the project prior to CEQA review and presents a significant issue as mitigation measures CUL 1, CUL 2, CUL 3, GEO 1, PAL 1, HAZ 1, HAZ 2, NOI 1, TCR 1, TCR 2, TCR 3, TCR 4, and TCR 5 all involve construction/soils related activity and the project has not adhered to these measures. An EIR must be prepared to describe the demolition/site preparation that has already occurred, note that the activity did not comply with the above mitigation measures, and provide a finding of significance in each of these areas because the completed demolition/site preparation is not able to comply with the mitigation measures listed above.

4.3 Air Quality, 4.6 Energy, and 4.8 Greenhouse Gas Emissions

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

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[1] https://aca-prod.accela.com/FONTANA/Cap/CapDetail.aspx?Module=Planning&TabName=Planning&capID1=22HIS&capID2=00000&capID3=07U4U&agencyCode=FONTANA&IsToShowInspection=

[2] https://aca-prod.accela.com/FONTANA/Cap/CapDetail.aspx?Module=Building&capID1=23HIS&capID2=00000&capID3=03PZX&agencyCode=FONTANA

The MND provides a brief list of information regarding the project's census tract scores within CalEnviroScreen 4.0[3], CalEPA's screening tool that ranks each census tract in the state for pollution and socioeconomic vulnerability. However, the MND does not utilize this information to meaningfully analyze the impacts of the proposed project (and in a cumulative setting) to illustrate the disproportionate environmental and health impacts faced by the community due to exponential industrial warehouse development in Fontana. The proposed project s census tract (6071002601) ranks worse than 97% of the rest of the state in overall pollution burden. The proposed project's census tract and surrounding community, including residences immediately adjacent to the east and north, Jurupa Hills High School adjacent to the south, Citrus High School to the southeast, and other residences to the west, bears the impact of multiple sources of pollution and is more polluted than average on several pollution indicators measured by CalEnviroScreen. For example, the project census tract ranks in the 95th percentile for ozone burden, the 94th percentile for PM 2.5 burden, the 78th percentile for diesel particulate matter burden, and the 80th percentile for traffic impacts. All of these environmental factors are attributed to heavy truck/trailer activity in the area. Ozone can cause lung irritation, inflammation, and worsening of existing chronic health conditions, even at low levels of exposure[4]. The very small particles of diesel PM can reach deep into the lung, where they can contribute to a range of health problems. These include irritation to the eyes, throat and nose, heart and lung disease, and lung cancer[5].

The census tract ranks in the 96th percentile for contaminated drinking water. Poor communities are exposed to contaminants in their drinking water more often than people in other parts of the state[6]. The census tract ranks in the 85th percentile for toxic releases. People living near facilities that emit toxic releases may breathe contaminated air regularly or if contaminants are released during an accident[7].

The census tract also ranks in the 87th percentile for solid waste facility impacts and 94th percentile for hazardous waste facility impacts. Solid waste facilities can expose people to hazardous chemicals, release toxic gases into the air (even after these facilites are closed), and chemicals can leach into soil around the facility and pose a health risk to nearby populations[8]. Hazardous waste

[3] CalEnviroScreen 4.0 https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40
[4] OEHHA Ozone https://oehha.ca.gov/calenviroscreen/indicator/air-quality-ozone
[5] OEHHA Diesel Particulate Matter https://oehha.ca.gov/calenviroscreen/indicator/diesel-particulate-matter
[6] OEHHA Contaminated Drinking Water https://oehha.ca.gov/calenviroscreen/drinking-water
[7] OEHHA Toxic Releases https://oehha.ca.gov/calenviroscreen/indicator/toxic-releases-facilities
[8] OEHHA Solid Waste Facilities https://oehha.ca.gov/calenviroscreen/indicator/solid-waste-sites-and-facilities

generators and facilities contribute to the contamination of air, water and soil near waste generators and facilities can harm the environment as well as people[9].

The census tract also bears more impacts from cleanup sites than 83% of the state. Chemicals in the buildings, soil, or water at cleanup sites can move into nearby communities through the air or movement of water[10].

Further, the census tract is a diverse community including 66% Hispanic, 9% Asian-American and 8% African-American residents, whom are especially vulnerable to the impacts of pollution. The community has a high rate of low educational attainment, meaning 73% of the census tract over age 25 has not attained a high school diploma, which is an indication that they may lack health insurance or access to medical care. The community has a high rate of poverty, meaning 51% of the households in the census tract have a total income before taxes that is less than the poverty level. Income can affect health when people cannot afford healthy living and working conditions, nutritious food and necessary medical care[11]. Poor communities are often located in areas with high levels of pollution[12]. Poverty can cause stress that weakens the immune system and causes people to become ill from pollution[13]. Living in poverty is also an indication that residents may lack health insurance or access to medical care. Medical care is vital for this census tract as it ranks in the 55th percentile for incidence of cardiovascular disease and 44th percentile for incidence of asthma.

Additionally, the census tracts adjacent to the project site (6071002606 (south), 6071003301 (north), 6071003302 (north), 6071002501 (north) and 6071004001 (east)) are identified as SB 535 Disadvantaged Communities[14]. This indicates that cumulative impacts of development and environmental impacts in the City are disproportionately impacting these communities. The MND does not discuss that the surrounding area are disadvantaged communities and does not utilize this information in its analysis. The negative environmental, health, and quality of life impacts of the warehousing and logistics industry in the City have become distinctly inequitable. The severity of environmental impacts (including at a cumulative level) particularly on these Disadvantaged Communities must be included for analysis as part of an EIR.

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[9] OEHHA Hazardous Waste Generators and Facilities https://oehha.ca.gov/calenviroscreen/indicator/hazardous-waste-generators-and-facilities
[10] OEHHA Cleanup Sites https://oehha.ca.gov/calenviroscreen/indicator/cleanup-sites
[11] OEHHA Poverty https://oehha.ca.gov/calenviroscreen/indicator/poverty
[12] Ibid.
[13] Ibid.
[14] OEHHA SB 535 Census Tracts https://oehha.ca.gov/calenviroscreen/sb535

The State of California lists three approved compliance modeling softwares[15] for non-residential buildings: CBECC-Com, EnergyPro, and IES VE. CalEEMod is not listed as an approved software. The CalEEMod modeling does not comply with the 2022 Building Energy Efficiency Standards and under-reports the project s significant Energy impacts and fuel consumption to the public and decision makers. Since the MND did not accurately or adequately model the energy impacts in compliance with Title 24, it cannot conclude the project will generate less than significant impacts and a finding of significance must be made. An EIR with modeling using one of the approved software types must be prepared and circulated for public review in order to adequately analyze the project s significant environmental impacts. This is vital as the MND utilizes CalEEMod as a source in its methodology and analysis, which is clearly not an approved software.

It must also be noted that the City is not listed as a jurisdiction with local energy standards approved by the CA Energy Commission[16]. According to the CA Energy Commission, "Local jurisdictions wishing to enforce locally adopted energy standards that exceed the current energy code are required to apply to the California Energy Commission (CEC). Local jurisdictions must demonstrate their local ordinance, or reach code, saves more energy than current statewide energy standards and is cost effective." Therefore, compliance with the General Plan does not comply with CA Energy Commission standards or AB 32/SB 32. The MND is misleading to the public and decision makers by stating compliance with these standards when the local jurisdiction standards have not been approved by the CA Energy Commission. The MND also uses uncertain and misleading language in stating that, "Project would be subject to the California Title 24 Building Code energy efficiency standards for nonresidential buildings, which would help reduce energy consumption. Equipment and vehicles associated with construction and operation of the Project would also be subject to fuel standards at the state and federal level. The Project would inherently benefit from programs implemented to achieve the goals of the Sustainable Freight Plan, such as the turnover of older, less fuel-efficient trucks, as fuel economy standards are rolled out and Zero Emissions Vehicle (ZEV) trucks become more widely available and cost effective for business." The MND has not provided any meaningful evidence to demonstrate that the project being "Subject to" state requirements ensures that the project will comply with these requirements or implement any of these future actions such as "operation of the Project is expected to decrease the amount of petroleum it consumes in the future due to advances in fuel economy," or providing

[15] California Energy Commission 2022 Energy Code Compliance Software https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-1

[16] Local Ordinances Exceeding the 2022 Energy Code, California Energy Commission https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-2

any quantification of the alleged reductions. The MND has not provided any meaningful evidence to conclude that the project does not result in a significant and unavoidable impact and an EIR must be prepared.

4.11 Land Use and Planning

The MND utilizes misleading language in discussing the project's proposed General Plan Amendment and Zone Change to change the land use designations for a portion of the project site from Community Commercial to Light Industrial. The MND states that, "Conversion of that parcel to industrial uses would not in and of itself contribute to any significant impacts as it is on the northeast corner of Citrus Avenue and Slover Avenue and there is already a warehouse located on the southeast corner of that intersection. Therefore, changing this small (1.2- acre site or 7% of the site) from commercial to industrial use would not cause a significant land use change to the Project area as the remaining 16.19 acres of the site (93%) is already designated for industrial use." The MND utilizes a misleading claim that the proposed project is consistent with the General Plan and Zoning designations because other warehouses exist in the vicinity of the site and the majority of the remainder of the project site is already designated Light Industrial. This reasoning does not sufficiently support the notion that the project is consistent with the General Plan and Zoning requirements. The MND does not provide any analysis or discussion regarding the loss of commercially designated land and that this will contribute to increased VMT among residents and students in the project vicinity in order to access daily needs and services, as demonstrated by the City's General Plan statements that the Community Commercial land use is sited "in locations where neighborhood serving retail is more suitable," "Community Commercial can function as a transitional land use," and "an intersection with C-C land uses can serve surrounding residents without the impacts of larger scale CG retail."

The MND does not provide any substantial or meaningful evidence or analysis of the proposed General Plan Amendment and Zone Change. Table 4.11-2 General Plan Consistency Analysis also does not consider the proposed project's required land use changes in its discussion and analysis. An EIR must be prepared to provide a consistency analysis with all Fontana General Plan objectives, goals, policies, and actions, including but not limited to the following:

6. EJ Goal 2: The City of Fontana incorporates health considerations into the development review process.
7. Policy: Support including Healthy Fontana development analysis in relevant development project reviews.

8. Healthier Fontana Goal 1 Policy 3: Support local and regional initiatives to improve air quality in order to reduce asthma while actively discouraging development that may exacerbate asthma rates.

9. Sustainability and Resilience Element Goal 4: Reduce GHG emissions by 2030.

10. Circulation Element Goal 5: Fontana s commercial and mixed-use areas include a multifunctional street network that ensures a safe, comfortable, and efficient movement of people, goods, and services to support a high quality of life and economic vitality.
11. Circulation Element Policy: Maintain levels of service for passenger vehicles, transit vehicles, trucks, bicyclists, and pedestrians that are appropriate for the context of the area.

Notably, the analysis provided for several General Plan Goals and Policies is misleading and/or erroneous. For example, the consistency analysis with Goal 1: The Strategic Policy Map and the Land Use Map guide land-use decision making concludes the project is consistent with these items, stating that, "As shown below, the Project is consistent with both the Strategic Policy Map and the Land Use Map." The project is not consistent with the Land Use Map and requires a General Plan Amendment and Zone Change to proceed. An EIR must be prepared to include this for information and analysis and include a finding of significance.

Further, the consistency analysis for Action A: Exhibit 15.7 Strategic Policy Map. Legend says goal for areas immediately north and south of the I-10 Freeway is to… "continue upgrading light industrial areas to be regionally competitive," concludes the project is consistent with this, stating that, "The Project is located just south of I10 within area designated for light industrial uses. Project is a warehouse consistent with the light industrial land use designation and zoning."The project is not consistent with the Land Use Map and requires a General Plan Amendment and Zone Change to proceed. An EIR must be prepared to include this for information and analysis and include a finding of significance.

The MND's consistency analysis with, "Light Industry. Warehousing, trucking, manufacturing and support industries are focused especially along regional transportation routes. Some of these areas need upgrades in order to increase or maintain competitiveness," concludes the project is consistent with this, stating that, Consistent. The Project is in an area designated for light industrial land uses south of the I-10, a regional transportation route." The project is not consistent with the Land Use Map, is not entirely located in an area designated for light industrial development, and requires a General Plan Amendment and Zone Change to proceed. An EIR must be prepared to include this for information and analysis and include a finding of significance.

The MND's consistency analysis with, "Action B. Use the Land Use Map to designate land uses in the city. (GP Exhibit 15.8) LUM I-L: Light Industrial (0.1–0.6 FAR). Employee-intensive uses, including business parks, research and development, technology centers, corporate and support office uses, clean industry, supporting retail uses, truck and equipment sales and related services are allowed. Warehouses that are designed in ways that limit off-site impacts are also permitted," concludes the project is consistent with this, stating that, Consistent. The Project is consistent with the planned light industrial uses in this area shown on the Land Use Map (LUM). The Initial Study demonstrates that with recommended mitigation, standard conditions, and regulatory compliance, the Project will not result in any significant environmental impacts." The project is not consistent with the Land Use Map and requires a General Plan Amendment and Zone Change to proceed. An EIR must be prepared to include this for information and analysis and include a finding of significance.

The MND has not provided any discussion or analysis that the project requires a General Plan Amendment to change the General Plan land use designation on the project site from Community Commercial to Light Industrial and a Zone Change to change the zoning designation from Community Commercial to Light Industrial. Therefore, the proposed project was not included for analysis as part of the General Plan and its EIR, AQMP, or RTP/SCS. An EIR must be prepared with a finding of significance.

Table 4.11-4: Consistency with SCAG Connect SoCal Goals also provides a misleading and erroneous consistency analysis with SCAG's 2020-2045 Connect SoCal RTP/SCS. The 2020 RTP/SCS is notably adopted for the purpose of avoiding or mitigating an environmental effect, as required by California law (SB 375 to reduce greenhouse gas emissions), detailed through the plan itself and Resolution No. 20-621-1 adopting the plan[17]. Due to errors in modeling and modeling without supporting evidence (as noted throughout this comment letter and attachments), the proposed project has significant potential for inconsistency with Goal 5 to reduce greenhouse gas emissions and improve air quality, Goal 6 to support healthy and equitable communities, and Goal 7 to adapt to a changing climate. An EIR must be prepared to include a finding of significance due to these inconsistencies with SCAG's 2020-2045 Connect SoCal RTP/SCS. Notably, the MND is egregiously inadequate as an informational document here in that its consistency analysis for Goal 6 to support healthy and equitable communities is an incomplete sentence: "The Project will comply with the requirements of the."

[17] SCAG 2020 RTP/SCS https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176

The MND does not include any information regarding the buildout conditions of the City's General Plan. An EIR must be prepared with this information for discussion in order to provide an adequate and accurate environmental analysis.

Further, the Transportation section of the MND lists the following "Traffic Conditions of Approval: After review of the proposed site plan, City staff recommended the following COAs in January 2024 to assure the project would not result in adverse traffic circulation or congestion-related conditions in the vicinity of the Project site:

A) The applicant shall design and construct a modification to the existing raised planted median along Slover Ave to allow for a minimum of 240 of full-width queuing area for each of the westbound dual-left-turn lanes and to accommodate a minimum of 240 of full-width queueing area for an eastbound left-turn lane into the project site.

B) Of the three access points along Slover Ave, the westernmost project driveway shall be at least 400 east of the intersection of Slover Ave and Citrus Ave, as measured from the limit-line along westbound Slover Ave to the western edge of the driveway.

C) Of the three access points along Slover Ave, the central project driveway shall be separated by at least 250 from adjacent driveways, as measured from the closest edge of each driveway.

D) Left-turn ingress and/or egress at all access locations shall be subject to approval of the City Engineer and may be restricted in the future due to traffic operational or safety concerns. Alternatives to such restrictions may be considered.

E) Of the three access points along Slover Ave, the westernmost project driveway shall be designed, constructed, and signed to restrict ingress and egress to right-in and right-out movements only.

F) Of the three access points along Slover Ave, the central project driveway shall be designed, constructed, and signed to restrict ingress and egress to right-in, left-in, and right-out movements only.

G) Of the three access points along Slover Ave, the easternmost project driveway shall be designed, constructed, and signed to restrict ingress and egress to right-in and right-out movements only.

H) Of the three access points along Slover Ave, the easternmost project driveway shall be restricted to vehicular access only, until such time as the adjacent land use is no longer deemed a sensitive receptor, or until such time that the distance between the driveway and the sensitive receptor is sufficiently large per the relevant state and local regulations.

I) Intersection sight distance and stopping sight distance must be shown to meet the required standards both horizontally and vertically at all ingress/egress locations including consideration for walls, landscaping, grading, and vegetation.

J) The location of bicycle parking shall be depicted on the site plan. Bicycle parking shall comply with the Association of Pedestrian and Bicycle Professionals

K) All gated ingress locations shall provide a visual indication to drivers prior to entering the gated driveway whether the gate is closed or open. This may be excluded if sufficient turn-around space is provided for the design vehicle or if the gate is manned with personnel who would permit an errant driver to enter the gate to turn around and depart. At no time shall the project cause vehicles entering the site to need to reverse into a travel lane in the public right-of-way in order to depart or turn-around.

L) The applicant shall design and construct any signal modifications needed to accommodate all project-implemented improvements."

The MND also states that, "these measures are recommended to address Level of Service (LOS) or congestion-related impacts of the Project which are no longer considered environmental issues under CEQA. They are considered planning and engineering concerns since the Initial Study did not identify any significant traffic impacts related to the Project that require mitigation." The MND provides verification that significant impacts will result to LOS and geometric designs/intersections due to implementation of the project. Additionally, the Site Plan provided in the MND has not been updated to reflect these requirements. An EIR must be prepared to provide a complete LOS analysis in order to demonstrate less than significant impacts for Transportation Impact Threshold A and Land Use and Planning Impact Threshold B because it is not consistent with the following General Plan items:

1. Circulation Element Goal 5: Fontana s commercial and mixed-use areas include a multifunctional street network that ensures a safe, comfortable, and efficient movement of people, goods, and services to support a high quality of life and economic vitality.
2. Circulation Element Policy: Maintain levels of service for passenger vehicles, transit vehicles, trucks, bicyclists, and pedestrians that are appropriate for the context of the area.

4.14 Population and Housing

The MND utilizes erroneous and misleading language to conclude the project will have less than significant impacts. For example, the MND states that, "The Project will be entirely light industrial, which is consistent with the General Plan and zoning designations of the site and surrounding area." This statement is not true as the project requires a General Plan Amendment and Zone Change to proceed. The MND continues by stating that, "Therefore, the Project will increase future employment in the area consistent with the growth projections of the Southern California Association of Governments (SCAG) in their 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) now referred to as Connect SoCal" (SCAG

2020)." Since the project requires a General Plan Amendment and Zone Change to proceed, it was not accounted for by the growth projections of the General Plan and its EIR, the AQMP, or SCAG's RTP/SCS. The MND has not provided any meaningful evidence to support this claim and an EIR must be prepared to include a finding of significance.

The MND does not provide any calculation of the construction or operational employees generated by the proposed project. SCAG's Employment Density Study[18] provides the following applicable employment generation rates for San Bernardino County:

1 employee per 1,195 sf of warehouse area
1 employee per 697 sf of office area

Application of these ratios results in the following calculation:

Warehouse: 348,995 sf / 1,195 sf = 293 employees
Office: 7,000 square feet / 697 sf = 11 employees
Total: 304 employees

SCAG's Connect SoCal Demographics and Growth Forecast[19] notes that the City will add 18,400 jobs between 2016 - 2045. Utilizing the SCAG Employment Density calculation of 304 employees, the project represents 1.6% of the City s employment growth from 2016 - 2045. SCAG's Growth Forecast notes that the City's population will increase by 75,700 residents between 2016 - 2045. Utilizing SCAG s Employment Density Study calculation of 304 employees and Fontana's household size of 4 people[20], the project will generate 1,216 residents; this represents 1.6% of the City s population growth from 2016 - 2045. A single project accounting for this amount of the projected employment and/or population over 29 years represents a significant amount of growth. A project EIR must be prepared to include this information for analysis.

The MND does not provide any geographic information regarding the location of available workers to fill the project's construction and operational jobs. The location of available workers can increase project VMT and therefore increase GHG emissions and Air Quality impacts. This

[18] SCAG Employment Density Study
http://www.mwcog.org/file.aspx?A=QTTlTR24POOOUIw5mPNzK8F4d8djdJe4LF9Exj6lXOU%3D
[19] SCAG Connect SoCal Demographics and Growth Forecast adopted September 3, 2020
https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579
[20] Fontana Demographic Information https://www.fontana.org/761/Business-Resources

information must be presented in an EIR in order to provide an adequate and accurate environmental analysis.

An EIR must also provide a cumulative analysis discussion of projects approved since 2016 and projects "in the pipeline" to determine if the project will exceed SCAG's employment or population growth forecast for the City. For example, the 3,736,156 sf of warehousing proposed by the five recent Alere Realty projects (Citrus Commerce Center (3 industrial buildings totaling 1,830,000 sf), 16270 Jurupa Avenue (631,000 sf industrial building), 13032 Slover Avenue (672,000 sf industrial building), Master Case No. 20-049/Tentative Parcel Map No. 20235 (TPM No. 20-014), and Design Review No. 20-019 (247,786 sf industrial building)[21], Fontana Corporate Center (355,370 sf industrial building), Sierra Business Center[22] (510 employees), Citrus and Oleander at Santa Ana Avenue[23] (595 employees), Cypress and Slover Warehouse[24] (531 employees), Poplar South Distribution Center[25] (411 employees), Hemlock Warehouse[26] (763 employees), and Beech Avenue Logistics Center[27] (151 employees) combined with the proposed project's 304 employees, this brief list of recent industrial projects alone will generate 6,398 employees. This represents 34% of the City's job growth over 29 years accounted for by only a brief list of recent industrial projects. This total increases exponentially when commercial development activity and other industrial projects are added to the calculation. An EIR must be prepared to include this information for analysis and also include a cumulative development analysis of projects approved since 2016 and projects in the pipeline" to determine if the proposed project exceeds SCAG's growth forecasts and/or the buildout scenario and employment projections of the General Plan.

The MND also states that the "Project site is currently vacant with no housing or other related structures present," to conclude the project will have less than significant impacts to population and housing. The MND excludes from analysis that the project site was developed with 15 single family dwellings. According to the City's building permit data portal, building permits (BLD23-002968 through BLD23-002983[28]) were issued to demolish all 15 existing residences on the site

[21] Fontana Planning Commission August 17, 2021 Agenda Packet https://fontana.legistar.com/View.ashx?M=PA&ID=872341&GUID=A694AA6F-F236-4B53-B537-025338533AF9
[22] Sierra Business Center https://ceqanet.opr.ca.gov/2020100256/3
[23] Citrus and Oleander at Santa Ana Avenue https://ceqanet.opr.ca.gov/2022110389/2
[24] Cypres and Slover Warehouse https://ceqanet.opr.ca.gov/2021120059/2
[25] Poplar South Distribution Center https://ceqanet.opr.ca.gov/2022090611/2
[26] Hemlock Warehouse https://ceqanet.opr.ca.gov/2009091089/8
[27] Beech Avenue Logistics Center https://ceqanet.opr.ca.gov/2023110591
[28] https://aca-prod.accela.com/FONTANA/Cap/CapDetail.aspx?Module=Planning&TabName=Planning&capID1=22HIS&capID2=00000&capID3=07U4U&agencyCode=FONTANA&IsToShowInspection=

with a date of May 8, 2023. This is well after the proposed project was submitted to the City on August 29, 2022 and after environmental analysis commenced. The MND selectively chooses the status of the project site with each type of impact threshold in order to present artificially low impacts. An EIR must be prepared to provide this information for discussion and analysis.

4.17 Transportation

The MND improperly "screens out" the project from performing a project-specific VMT analysis. Appendix H states that, "The proposed project is forecast to result in 498 net daily vehicle trips; therefore, the proposed project satisfies the City-established screening criteria for projects generating less than 500 net daily and may be presumed to result in a less than significant VMT impact," in an effort to artificially appease the City's Traffic Impact Analysis Guidelines[29] that exempts projects generating less than 500 ADT from providing a complete VMT analysis.

However, Appendix H and the MND leave out that Section 3.0 of the City s Traffic Impact Analysis Guidelines states that "industrial, warehousing and truck projects shall convert trucks to PCE s before applying the above threshold" in determining the ADT of projects. Appendix B of the TIA Guidelines also requires PCE to be utilized in VMT analysis. Table 1: Project Trip Generation within Appendix H states that the proposed project will generate 633 PCE trips daily. Converting the 498 ADT to PCE indicates that the project exceeds the City's VMT screening threshold of 500 ADT. Therefore, a project-specific VMT analysis analysis is required and must be included as part of an EIR.

Further, the VMT analysis has not analyzed the project's truck/trailer/delivery van activity. An EIR must be prepared to include all truck/trailer/delivery van activity for quantified VMT analysis. The operational nature of industrial/warehouse uses involves high rates of truck/trailer/delivery van VMT due to traveling from large import hubs to regional distribution centers to smaller industrial parks and then to their final delivery destinations. Once employees arrive at the industrial building for work, they will conduct their jobs by driving truck/trailer/delivery vans across the region as part of the daily operations as a high-cube warehouse facility, which will drastically increase project-generated VMT. The project's truck/trailer and delivery van activity is unable to utilize public transit or active transportation and it is misleading to the public and decision makers to exclude this activity from VMT analysis. An EIR must be prepared to reflect a quantified VMT analysis that includes all truck/trailer and delivery van activity.

[29] Fontana Traffic Impact Analysis Guidelines
https://www.fontanaca.gov/DocumentCenter/View/35928/TIA-Guidelines---VMT-Assessment

The MND has not adequately analyzed the project's potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses; or the project's potential to result in inadequate emergency access. The MND lists the following "Traffic Conditions of Approval: After review of the proposed site plan, City staff recommended the following COAs in January 2024 to assure the project would not result in adverse traffic circulation or congestion-related conditions in the vicinity of the Project site:

A) The applicant shall design and construct a modification to the existing raised planted median along Slover Ave to allow for a minimum of 240 of full-width queuing area for each of the westbound dual-left-turn lanes and to accommodate a minimum of 240 of full-width queueing area for an eastbound left-turn lane into the project site.

B) Of the three access points along Slover Ave, the westernmost project driveway shall be at least 400 east of the intersection of Slover Ave and Citrus Ave, as measured from the limit-line along westbound Slover Ave to the western edge of the driveway.

C) Of the three access points along Slover Ave, the central project driveway shall be separated by at least 250 from adjacent driveways, as measured from the closest edge of each driveway.

D) Left-turn ingress and/or egress at all access locations shall be subject to approval of the City Engineer and may be restricted in the future due to traffic operational or safety concerns. Alternatives to such restrictions may be considered.

E) Of the three access points along Slover Ave, the westernmost project driveway shall be designed, constructed, and signed to restrict ingress and egress to right-in and right-out movements only.

F) Of the three access points along Slover Ave, the central project driveway shall be designed, constructed, and signed to restrict ingress and egress to right-in, left-in, and right-out movements only.

G) Of the three access points along Slover Ave, the easternmost project driveway shall be designed, constructed, and signed to restrict ingress and egress to right-in and right-out movements only.

H) Of the three access points along Slover Ave, the easternmost project driveway shall be restricted to vehicular access only, until such time as the adjacent land use is no longer deemed a sensitive receptor, or until such time that the distance between the driveway and the sensitive receptor is sufficiently large per the relevant state and local regulations.

I) Intersection sight distance and stopping sight distance must be shown to meet the required standards both horizontally and vertically at all ingress/egress locations including consideration for walls, landscaping, grading, and vegetation.

J) The location of bicycle parking shall be depicted on the site plan. Bicycle parking shall comply with the Association of Pedestrian and Bicycle Professionals

K) All gated ingress locations shall provide a visual indication to drivers prior to entering the gated driveway whether the gate is closed or open. This may be excluded if sufficient turn-around space is provided for the design vehicle or if the gate is manned with personnel who would permit an errant driver to enter the gate to turn around and depart. At no time shall the project cause vehicles entering the site to need to reverse into a travel lane in the public right-of-way in order to depart or turn-around.

L) The applicant shall design and construct any signal modifications needed to accommodate all project-implemented improvements."

The MND also states that, "these measures are recommended to address Level of Service (LOS) or congestion-related impacts of the Project which are no longer considered environmental issues under CEQA. They are considered planning and engineering concerns since the Initial Study did not identify any significant traffic impacts related to the Project that require mitigation." The MND provides verification that significant impacts will result to LOS and geometric designs/intersections due to implementation of the project. Additionally, the Site Plan provided in the MND has not been updated to reflect these requirements. An EIR must be prepared to provide a complete LOS analysis in order to demonstrate less than significant impacts for Transportation Impact Threshold A and Land Use and Planning Impact Threshold B because it is not consistent with the following General Plan items:

1. Circulation Element Goal 5: Fontana s commercial and mixed-use areas include a multifunctional street network that ensures a safe, comfortable, and efficient movement of people, goods, and services to support a high quality of life and economic vitality.
2. Circulation Element Policy: Maintain levels of service for passenger vehicles, transit vehicles, trucks, bicyclists, and pedestrians that are appropriate for the context of the area.

The MND also states that, "Final Project site plans will be subject to review and approval by City planning and engineering staff, as well as police and fire personnel, who will ensure that site access and internal circulation are safe, have adequate sight distance, and driveway widths and stop signs are placed where necessary for entering and exiting the site." The MND makes a similar statement regarding emergency access, stating that "Per state Fire and Building Codes, sufficient space will have to be provided around the planned building for emergency personnel and equipment to access the entire site. All improvements will be required to comply with the California Fire Code (Title 24, California Code of Regulations, Section 9) in terms of emergency access to the new building. Project site plans will be subject to review and approval by City planning and engineering staff, as well as police and fire personnel, who will ensure that site access and internal circulation are safe, have adequate sight distance, and driveway widths and stop signs are placed where necessary for entering and exiting the site," without providing any meaningful evidence to support this claim.

This does not comply with CEQA's requirements for adequate informational documents and meaningful disclosure (CEQA § 15121 and 21003(b)). Deferring this environmental analysis required by CEQA to the construction permitting phase is improper mitigation and does not comply with CEQA's requirement for meaningful disclosure and adequate informational documents. An EIR must be prepared to include the City determination/review of the project and the Site Plan for review, analysis, and comment by the public and decision makers in order to provide an adequate and accurate environmental analysis.

4.21 Mandatory Findings of Significance

The MND does not meaningfully discuss or analyze the project's required land use designation changes (General Plan Amendment and Zone Change) from Community Commercial to Light Industrial. This increases the developable industrial area of the City without providing any information or analysis on the buildout conditions of the General Plan. The growth generated by the proposed project was not anticipated by the General Plan, RTP/SCS, or AQMP. The MND is misleading to the public and decision makers in stating here that the project is, "consistent with the General Plan and zoning designations" when a General Plan Amendment and Zone Change are required to implement the proposed project. An EIR must be prepared to provide an adequate informational document with this information for discussion and analysis.

An EIR must be prepared to include a cumulative analysis discussion here to demonstrate the impact of the proposed project in a cumulative setting. The MND does not include any information regarding the buildout conditions of the City's General Plan in order to provide an adequate and accurate cumulative analysis. An EIR must be prepared to provide a cumulative analysis discussion of projects approved since General Plan adoption and projects in the pipeline" to determine if the project will exceed SCAG s and/or the City s General Plan growth estimates for the City.

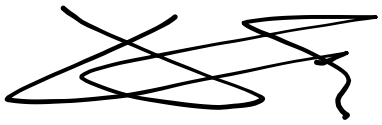
An EIR must also provide a cumulative analysis discussion of projects approved since 2016 and projects "in the pipeline" to determine if the project will exceed SCAG's employment or population growth forecast for the City. For example, the 3,736,156 sf of warehousing proposed by the five recent Alere Realty projects (Citrus Commerce Center (3 industrial buildings totaling 1,830,000 sf), 16270 Jurupa Avenue (631,000 sf industrial building), 13032 Slover Avenue (672,000 sf industrial building), Master Case No. 20-049/Tentative Parcel Map No. 20235 (TPM

No. 20-014), and Design Review No. 20-019 (247,786 sf industrial building)[30], Fontana Corporate Center (355,370 sf industrial building), Sierra Business Center[31] (510 employees), Citrus and Oleander at Santa Ana Avenue[32] (595 employees), Cypress and Slover Warehouse[33] (531 employees), Poplar South Distribution Center[34] (411 employees), Hemlock Warehouse[35] (763 employees), and Beech Avenue Logistics Center[36] (151 employees) combined with the proposed project's 304 employees, this brief list of recent industrial projects alone will generate 6,398 employees. This represents 34% of the City's job growth over 29 years accounted for by only a brief list of recent industrial projects. This total increases exponentially when commercial development activity and other industrial projects are added to the calculation. An EIR must be prepared to include this information for analysis and also include a cumulative development analysis of projects approved since 2016 and projects in the pipeline" to determine if the proposed project exceeds SCAG's growth forecasts and/or the buildout scenario and employment projections of the General Plan.

Conclusion

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

Sincerely,



Gary Ho
Blum, Collins & Ho LLP
Attachments:

1. SWAPE Technical Analysis

[30] Fontana Planning Commission August 17, 2021 Agenda Packet https://fontana.legistar.com/View.ashx?M=PA&ID=872341&GUID=A694AA6F-F236-4B53-B537-025338533AF9
[31] Sierra Business Center https://ceqanet.opr.ca.gov/2020100256/3
[32] Citrus and Oleander at Santa Ana Avenue https://ceqanet.opr.ca.gov/2022110389/2
[33] Cypres and Slover Warehouse https://ceqanet.opr.ca.gov/2021120059/2
[34] Poplar South Distribution Center https://ceqanet.opr.ca.gov/2022090611/2
[35] Hemlock Warehouse https://ceqanet.opr.ca.gov/2009091089/8
[36] Beech Avenue Logistics Center https://ceqanet.opr.ca.gov/2023110591

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March 14, 2024

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Los Angeles, CA 90017

Subject: Comments on the Citrus Avenue Industrial Warehouse Project (SCH No. 2024020971)

Dear Mr. Ho,

We have reviewed the February 2024 Initial Study and Mitigated Negative Declaration ("IS/MND") for the Citrus Avenue Industrial Warehouse Project ("Project") located in the City of Fontana ("City"). The Project proposes to construct 355,995-square-feet ("SF") of industrial space, including 7,000-SF of office space and 169 parking spaces, on the 17.39-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 may be 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.

Air Quality

Failure to Provide Complete CalEEMod Output Files

Land use development projects under the California Environmental Quality Act ("CEQA") typically evaluate air quality impacts and calculate potential criteria air pollutant emissions using the California Emissions Estimator Model ("CalEEMod"). [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

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

can change the default values and input project-specific values, but 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 used in calculating the Project's air pollutant emissions and demonstrate which default values are changed. Justifications are provided for the selected values.

According to the Air Quality and Health Risk Assessment Report ("AQ & HRA Report"), included as Appendix A-1, and the Energy and Greenhouse Gas Impact Analysis Report ("GHG Report"), included as Appendix A-2 to the IS/MND, CalEEMod Version 2022.1 is relied upon to estimate Project emissions (IS/MND, p. 9). However, this poses a problem, as the currently available version of CalEEMod 2022.1 is described as a "soft release" which fails to provide complete output files.[2] Specifically, the "User Changes to Default Data" table no longer provides the quantitative counterparts to the changes to the default values (see excerpt below) (Appendix A-1, pp. 197):

8. User Changes to Default Data

Screen	Justification
Land Use	Land use information updated based on the site plan.
Construction: Construction Phases	Construction schedule updated with information from the project applicant.
Construction: Off-Road Equipment	Generators and forklift type changed to electric and equipment changed from average to Tier 4 Final to reflect compliance with the Fontana Municipal Code. The following changes were made to reflect project specific information from the applicant: Number of concrete saws, graders, generators increased, number of excavators, dozers, tractors/loaders/backhoes, pavers, paving equipment, rollers decreased, hp for concrete saws, excavators, tractors/loaders/backhoes, graders, generators, pavers, paving equipment, rollers, air compressors increased, hp for dozers, crane decreased. Saws, excavator, dozer, pavers, paving equipment, rollers hours/day decreased. Removed scraper. Added trenching phase and equipment. Hours/day lowered based on the number of days per phase the equipment would be operational.
Construction: Trips and VMT	Worker trips updated based on peak workers for each phase. Vendor trips updated based on 7,200 cubic yards of concrete.
Construction: Architectural Coatings	Project would use super compliant paints to comply with the Fontana Municipal Code.
Construction: Paving	Paved area adjusted to remove landscaping sqft.
Operations: Fleet Mix	Fleet mix updated based on traffic report.
Operations: Vehicle Data	Trip rates and trip length for passenger cars updated based on traffic report. Trip length for truck trips increased to 40 miles, consistent with SCAQMD recommendations.

However, previous CalEEMod Versions, such as 2020.4.0, include the specific numeric changes to the model's default values (see example excerpt below):

[2] "CalEEMod California Emissions Estimator Model Soft Release." California Air Pollution Control Officers Association (CAPCOA), 2022, *available at:* https://caleemod.com/.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	167.00
tblConstructionPhase	PhaseEndDate	11/22/2023	8/25/2023
tblConstructionPhase	PhaseEndDate	9/27/2023	6/30/2023
tblConstructionPhase	PhaseEndDate	10/25/2023	7/28/2023
tblConstructionPhase	PhaseStartDate	10/26/2023	7/29/2023
tblConstructionPhase	PhaseStartDate	9/28/2023	7/1/2023
tblLandUse	LandUseSquareFeet	160,000.00	160,371.00
tblLandUse	LandUseSquareFeet	119,000.00	41,155.00
tblLandUse	LotAcreage	3.67	3.68
tblLandUse	LotAcreage	2.73	2.74

The output files associated with CalEEMod Version 2022.1 fail to present the exact parameters used to calculate Project emissions. To remedy this issue, the IS/MND should have provided access to the model's ".JSON" output files, which allow third parties to review the model's revised input parameters.[3] Without access to the complete output files, including the specific numeric changes to the default values, we cannot verify that the IS/MND's air modeling and subsequent analysis is an accurate reflection of the proposed Project. As a result, an EIR should be prepared to include an updated air quality analysis that correctly provides the complete output files for CalEEMod Version 2022.1, or includes an updated air model using an older release of CalEEMod.[4]

Unsubstantiated Input Parameters Used to Estimate Project Emissions

As previously discussed, the IS/MND relies on CalEEMod Version 2022.1 to estimate the Project's air quality emissions and fails to provide the complete output files required to adequately evaluate model's analysis (p. 42). Regardless, when reviewing the Project's CalEEMod output files, we were able to identify several model inputs that are inconsistent with information disclosed in the IS/MND. As such, the Project's construction and operational emissions may be underestimated. An EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

Unsubstantiated Changes to Architectural Coating Emission Factors

Review of the CalEEMod output files demonstrates that the "Fontana Citrus Industrial Building Project" model includes changes to the default architectural coating emission factors (see excerpt below) (Appendix A-1, pp. 197; Appendix A-2, pp. 169, 170).

[3] "Video Tutorials for CalEEMod Version 2022.1." California Air Pollution Control Officers Association (CAPCOA), May 2022, *available at:* https://www.caleemod.com/tutorials.

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

Screen	Justification
Land Use	Land use information updated based on the site plan.
Construction: Construction Phases	Construction schedule updated with information from the project applicant.
Construction: Off-Road Equipment	Generators and forklift type changed to electric and equipment changed from average to Tier 4 Final to reflect compliance with the Fontana Municipal Code. The following changes were made to reflect project specific information from the applicant: Number of concrete saws, graders, generators increased, number of excavators, dozers, tractors/loaders/backhoes, pavers, paving equipment, rollers decreased, hp for concrete saws, excavators, tractors/loaders/backhoes, graders, generators, pavers, paving equipment, rollers, air compressors increased, hp for dozers, crane decreased. Saws, excavator, dozer, pavers, paving equipment, rollers hours/day decreased. Removed scraper. Added trenching phase and equipment. Hours/day lowered based on the number of days per phase the equipment would be operational.
Construction: Trips and VMT	Worker trips updated based on peak workers for each phase. Vendor trips updated based on 7,200 cubic yards of concrete.
Construction: Architectural Coatings	Project would use super compliant paints to comply with the Fontana Municipal Code.
Construction: Paving	Paved area adjusted to remove landscaping sqft.
Operations: Fleet Mix	Fleet mix updated based on traffic report.
Operations: Vehicle Data	Trip rates and trip length for passenger cars updated based on traffic report. Trip length for truck trips increased to 40 miles, consistent with SCAQMD recommendations.

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[5] As demonstrated above in the "User Changes to Default Data" table, the justification provided for these changes is:

> "Project would use super compliant paints to comply with the Fontana Municipal Code." (Appendix A-1, pp. 151).

Furthermore, the Project relies on the Fontana General Plan Update ("Fontana GP"), which includes the South Coast Air Quality Management District ("SCAQMD") Rule 1113 concerning architectural coating values as a formal mitigation measure:

> "MM-AQ-11 All paints and coatings shall meet or exceed performance standards noted in SCAQMD Rule 1113. Specifically, the following measures shall be implemented, as feasible: Use coatings and solvents with a VOC content lower than that required under AQMD Rule 1113" (Fontana GP, pp. 89)

However, the model's reductions to the architectural coating emission factors remain unsubstantiated for two reasons.

First, we cannot verify the accuracy of the revised architectural coating emission factors based on SCAQMD Rule 1113 alone. The SCAQMD Rule 1113 Table of Standards provides the required volatile organic compound ("VOC") limits (grams of VOC per liter of coating) for 57 different coating categories.[6] The VOC limits for each coating varies from a minimum value of 50 g/L to a maximum value of 730 g/L. As such, we cannot verify that SCAQMD Rule 1113 substantiates reductions to the default coating values without more information regarding what category of coating will be used. As the IS/MND fails to

[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. 1, 14.
[6] "SCAQMD Rule 1113 Advisory Notice." SCAQMD, February 2016, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf?sfvrsn=24, p. 1113-14, Table of Standards 1.

explicitly require the use of a specific type of coating which would adhere to a specific VOC limit, we are unable to verify the model's revised coating emission factors.

Second, as previously discussed, the output files for CalEEMod 2022.1 do not present the numeric changes to any model defaults. Upon further review of the output files, Table 5.5 contains the only mention of architectural coatings (see excerpt below) (Appendix A-1, pp. 153, 189; Appendix A-2, pp. 159, 160):

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	540,750	180,250	20,517

However, as demonstrated above, Table 5.5 only provides the *square footage* of area to be coated. Since the output files fail to demonstrate the architectural coating *emission factors* that the model relies on, we cannot verify that the values included in the model are accurate. As previously stated, the IS/MND should have provided access to the model's ".JSON" output files, which allow third parties to review the model's revised input parameters.[7]

These unsubstantiated reductions present an issue, as CalEEMod uses the architectural coating emission factors to calculate the Project's reactive VOC emissions.[8] By including unsubstantiated reductions to the default architectural coating emission factors, the model may underestimate the Project's construction-related VOC emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Construction Trips and VMT Parameters

Review of the CalEEMod output files demonstrates that the "Fontana Citrus Industrial Building Project" model includes changes to the construction trips and VMT values (see excerpt below) (Appendix A-1, pp. 164, 197; Appendix A-2, pp. 170).

[7] "Video Tutorials for CalEEMod Version 2022.1." California Air Pollution Control Officers Association (CAPCOA), May 2022, *available at:* https://www.caleemod.com/tutorials.
[8] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 35, 40.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use information updated based on the site plan.
Construction: Construction Phases	Construction schedule updated with information from the project applicant.
Construction: Off-Road Equipment	Generators and forklift type changed to electric and equipment changed from average to Tier 4 Final to reflect compliance with the Fontana Municipal Code. The following changes were made to reflect project specific information from the applicant: Number of concrete saws, graders, generators increased, number of excavators, dozers, tractors/loaders/backhoes, pavers, paving equipment, rollers decreased, hp for concrete saws, excavators, tractors/loaders/backhoes, graders, generators, pavers, paving equipment, rollers, air compressors increased, hp for dozers, crane decreased. Saws, excavator, dozer, pavers, paving equipment, rollers hours/day decreased. Removed scraper. Added trenching phase and equipment. Hours/day lowered based on the number of days per phase the equipment would be operational.
Construction: Trips and VMT	Worker trips updated based on peak workers for each phase. Vendor trips updated based on 7,200 cubic yards of concrete.
Construction: Architectural Coatings	Project would use super compliant paints to comply with the Fontana Municipal Code.
Construction: Paving	Paved area adjusted to remove landscaping sqft.
Operations: Fleet Mix	Fleet mix updated based on traffic report.
Operations: Vehicle Data	Trip rates and trip length for passenger cars updated based on traffic report. Trip length for truck trips increased to 40 miles, consistent with SCAQMD recommendations.

The CalEEMod User's Guide requires any changes to model defaults be justified.[9] As demonstrated above, the justification provided in the "User Changes to Default Data" table is:

> "Worker trips updated based on peak workers for each phase. Vendor trips updated based on 7,200 cubic yards of concrete." (Appendix A-1, pp. 164, 197; Appendix A-2, pp. 170).

These changes remain unsupported, as the IS/MND and associated documents fail to discuss the revisions to the construction trips and VMT values whatsoever. As previously discussed, the CalEEMod User's Guide requires changes to be supported by substantial evidence.[10] Until the Project documents fail to provide substantial evidence to support the updated construction trips and VMT values, we cannot verify the changes.

These unsubstantiated reductions present an issue, as CalEEMod uses the trips and VMT values to estimate the construction-related emissions associated with on-road vehicles.[11] By including unsubstantiated changes to the construction trips and VMT values, the model may underestimate the Project's mobile-source construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Operational Fleet Mix Values

Review of the CalEEMod output files demonstrates that the "Fontana Citrus Industrial Building Project" model includes changes to the default operational vehicle fleet mix percentages (see excerpt below) (Appendix A-1, pp. 164, 197; Appendix A-2, 169, 170).

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9

[10] "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.

[11] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 34.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use information updated based on the site plan.
Construction: Construction Phases	Construction schedule updated with information from the project applicant.
Construction: Off-Road Equipment	Generators and forklift type changed to electric and equipment changed from average to Tier 4 Final to reflect compliance with the Fontana Municipal Code. The following changes were made to reflect project specific information from the applicant: Number of concrete saws, graders, generators increased, number of excavators, dozers, tractors/loaders/backhoes, pavers, paving equipment, rollers decreased, hp for concrete saws, excavators, tractors/loaders/backhoes, graders, generators, pavers, paving equipment, rollers, air compressors increased, hp for dozers, crane decreased. Saws, excavator, dozer, pavers, paving equipment, rollers hours/day decreased. Removed scraper. Added trenching phase and equipment. Hours/day lowered based on the number of days per phase the equipment would be operational.
Construction: Trips and VMT	Worker trips updated based on peak workers for each phase. Vendor trips updated based on 7,200 cubic yards of concrete.
Construction: Architectural Coatings	Project would use super compliant paints to comply with the Fontana Municipal Code.
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Operations: Fleet Mix	Fleet mix updated based on traffic report.
Operations: Vehicle Data	Trip rates and trip length for passenger cars updated based on traffic report. Trip length for truck trips increased to 40 miles, consistent with SCAQMD recommendations.

As previously stated, the CalEEMod User's Guide requires any changes to model defaults be justified.[12] As demonstrated above in the "User Changes to Default Data" table, the justification provided for these changes is:

> "Fleet mix updated based on traffic report" (Appendix A-1, pp. 164, 197; Appendix A-2, 169, 170).

Furthermore, the IS/MND includes the following Project Trip Generation table: (see excerpt below) (Appendix H-2, pp. 7)

TRIP GENERATION RATES PER TSF[1]								
Vehicle Type	Source[2]	AM Peak Hour			PM Peak Hour			Daily Rate
		In	Out	Rate	In	Out	Rate	
All Vehicles	ITE 154	77%	23%	0.080	28%	72%	0.100	1.400
Trucks Only	ITE 154	49%	51%	0.020	47%	53%	0.010	0.220
Passenger Car (75.0% AM, 90.0% PM, 84.3% Daily)		0.046	0.014	0.060	0.025	0.065	0.090	1.180
Truck (25.0% AM, 10.0% PM, 15.7% Daily)		0.010	0.010	0.020	0.005	0.005	0.010	0.220
Truck Mix:	SCAQMD							
2-Axle Trucks (16.7%)		0.002	0.002	0.004	0.001	0.001	0.002	0.037
3-Axle Trucks (20.7%)		0.002	0.002	0.004	0.001	0.001	0.002	0.046
4+ Axle Trucks (62.6%)		0.006	0.006	0.012	0.003	0.003	0.006	0.138

However, the changes to the model's operational fleet mix values remain unsubstantiated. As previously discussed, the output files for CalEEMod 2022.1 do not present the numeric changes to any model defaults. Upon further review of the output files, changes to fleet mix percentages are not mentioned outside of the "User Changes to Default Data" table. Until the IS/MND verifies the breakdown of heavy-

[12] "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.

heavy duty ("HHD"), medium-heavy duty ("MHD"), light-heavy duty ("LHD1, LDH2"), trucks used by the Project, we cannot verify that the values included in the model are accurate.[13]

These unsubstantiated changes present an issue, as CalEEMod uses operational vehicle fleet mix percentages to calculate the Project's operational emissions associated with on-road vehicles.[14] By including several unsubstantiated changes to the default operational vehicle fleet mix percentages, the model may underestimate the Project's mobile-source operational emissions and should not be relied upon to determine Project significance.

Unsubstantiated Reductions to Natural Gas Energy Use Values

Review of the CalEEMod output files demonstrates that the "Fontana Citrus Industrial Building Project" model includes changes to the default natural gas energy use values (see excerpt below) (Appendix A-1, pp. 163, 164; Appendix A-2, pp. 169, 170).

Screen	Justification
Land Use	Land use information updated based on the site plan.
Construction: Construction Phases	Construction schedule updated with information from the project applicant.
Construction: Off-Road Equipment	Generators and forklift type changed to electric and equipment changed from average to Tier 4 Final to reflect compliance with the Fontana Municipal Code. The following changes were made to reflect project specific information from the applicant: Number of concrete saws, graders, generators increased, number of excavators, dozers, tractors/loaders/backhoes, pavers, paving equipment, rollers decreased, hp for concrete saws, excavators, tractors/loaders/backhoes, graders, generators, pavers, paving equipment, rollers, air compressors increased, hp for dozers, crane decreased. Saws, excavator, dozer, pavers, paving equipment, rollers hours/day decreased. Removed scraper. Added trenching phase and equipment.
Construction: Trips and VMT	Worker trips updated based on peak workers for each phase. Vendor trips updated based on 7,200 cubic yards of concrete.
Construction: Architectural Coatings	Project would use super compliant paints to comply with the Fontana Municipal Code.
Construction: Paving	Paved area adjusted to remove landscaping sqft.
Operations: Fleet Mix	Fleet mix updated based on traffic report.
Operations: Vehicle Data	Trip rates and trip length for passenger cars updated based on data from SMBTA VMT Screening Tool. Truck trip distance weighted based on factors provided in Rule 2305 rule-making materials.
Operations: Refrigerants	Cold storage removed, since warehouse would be non-refrigerated warehouse space. A/C added for general building cooling. Information and rate from US EPA document cited by CalEEMod User Manual Appendix G, Sheet G-38.
Operations: Energy Use	Project would be all electric. NG consumption converted to electricity at a rate of 3.41 kBTU per kWh.
Operations: Water and Waste Water	Indoor water consumption updated based on information provided by Kier + Wright, reflecting indoor water used based on compliance with CalGreen Code requirements.

As previously stated, the CalEEMod User's Guide requires any changes to model defaults be justified.[15] As demonstrated above in the "User Changes to Default Data" table, the justification provided for these changes is:

> "Project would all be electric. NG consumption converted to electricity at a rate of 3.41 kBTU per kWh" (Appendix A-1, pp. 163, 164).

As a result of these changes, the energy use table demonstrates the Project will not use any natural gas (see excerpt below) (Appendix A-1, pp. 155; Appendix A-2, pp. 161):

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[13] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 38.
[14] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 36.
[15] "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.

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	3,617,515	349	0.0330	0.0040	0.00
General Office Building	140,215	349	0.0330	0.0040	0.00
Parking Lot	299,545	349	0.0330	0.0040	0.00

However, review of the IS/MND states the Project would rely on natural gas (see excerpt below):

> "The proposed Project would generate emissions from the combustion of natural gas in water and space heating equipment, as well as industrial processes." (IS/MND, p. 40).

There is a clear discrepancy between the IS/MND and the "Fontana Citrus Industrial Building Project" model. Until further clarification is provided in an EIR, the assumption that the Project would not require the use of natural gas is unsupported.

These unsubstantiated reductions present an issue, as the energy use values are used by CalEEMod to calculate the Project's emissions associated with building electricity and natural gas usage. [16] By assuming that the Project would not rely on any natural gas utilities, the model may underestimate the Project's operational emissions 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 omitted the unsubstantiated changes to architectural coating values, construction trips and VMT values; we also omitted the incorrect changes operational fleet mix values and natural gas values.[17] We matched all other input parameters to be consistent with the "Fontana Citrus Industrial building Project: Maximum Daily AG and Annual GHG (All Electric)" model.

Our updated analysis estimates that the volatile organic compound ("VOC") emissions associated with Project construction exceed the applicable SCAQMD threshold of 75 pounds per day ("lbs/day"), as referenced by the IS/MND (p. 40) (see table below).[18]

SWAPE Criteria Air Pollutant Emissions

IS/MND	**Construction ROG** (lbs/day)
IS/MND	0.8
SWAPE	133.9
% Increase	16,638%

[16] "CalEEMod User's Guide Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 43.
[17] See Attachment A for updated CalEEMod model.
[18] "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, April 2019, *available at*: https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25.

SCAQMD Threshold	**75.0**
Exceeds?	***Yes***

As demonstrated above, construction-related VOC emissions, as estimated by SWAPE, increase by approximately 16,638% and exceed the applicable SCAQMD significance threshold. Our updated modeling demonstrates that the Project would result in a potentially significant air quality impact that was not previously identified or addressed by the IS/MND. As a result, an EIR should be prepared to adequately assess and mitigate the potential air quality impacts that the Project may have on the environment.

Disproportionate Health Risk Impacts of Warehouses on Surrounding Communities

Upon review of the IS/MND and associated documents, we have determined that the development of the proposed Project may contribute to the disproportionate health risk impacts that warehouses pose to community members living, working, and going to school within the immediate area of the Project site. According to 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."[19]

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.[20] 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."[21] Additionally, a report authored by the Inland Empire-based People's Collective for Environmental Justice and University of Redlands states:

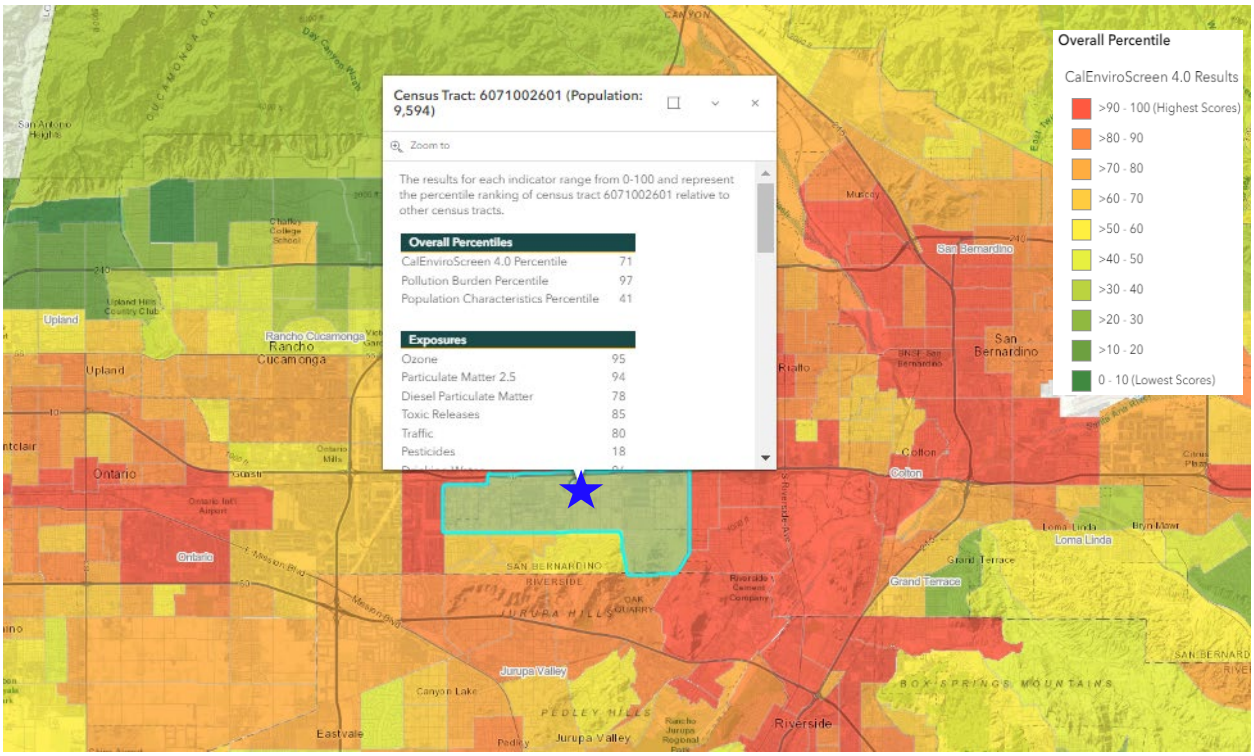
> "As the warehouse and logistics industry continues to grow and net exponential profits at record rates, more warehouse projects are being approved and constructed in low-income communities of color and serving as a massive source of pollution by attracting thousands of polluting truck trips daily. Diesel trucks emit dangerous levels of nitrogen oxide and particulate matter that cause devastating health impacts including asthma, chronic obstructive pulmonary

[19] "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.
[20] "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.
[21] "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.

disease (COPD), cancer, and premature death. As a result, physicians consider these pollution-burdened areas 'diesel death zones.'"[22]

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.

Fontana, 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 97th percentile of most polluted census tracts in the State (see excerpt below).[23]

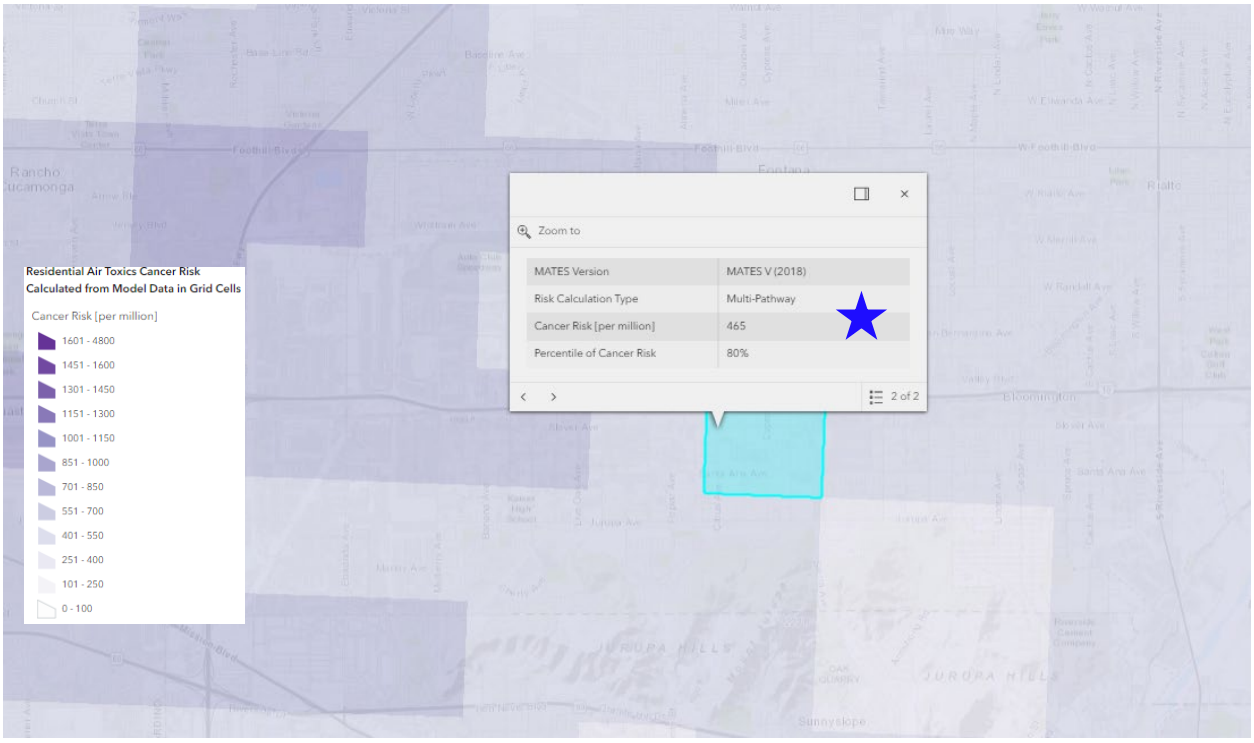


Furthermore, the Data Visualization Tool for Mates V, a monitoring and evaluation study conducted by SCAQMD, demonstrates that the city already exhibits a heightened residential carcinogenic risk from exposure to air toxins. Specifically, the location of the Project site is in the 80th percentile of highest cancer risks in the South Coast Air Basin, with a cancer risk of 465 in one million (see excerpt below).[24]

[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.

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

[24] "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-



Therefore, development of the proposed warehouse would contribute to the disproportionate impact warehouses are posing on the health conditions of the residents in Fontana.

In April 2022, the American Lung Association ranked San Bernadino County as the worst for ozone pollution in the nation.[25] 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.[26] 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."[27]

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.

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

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

[27] "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."[28]

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.[29] 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.

According to the above-mentioned study by the People's Collective for Environmental Justice and University of Redlands, 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.[30] Regarding the proposed Project itself, the IS/MND states:

> "The sensitive air quality receptors in proximity of the proposed Project site are:
>
> • Jurupa Hills High School approximately 700 feet south of the site;

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[28] "Children and Air Pollution." California Air Resources Board (CARB), *available at:* https://ww2.arb.ca.gov/resources/documents/children-and-air-pollution.

[29] "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/.

[30] "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.

• Fontana Adult School approximately 1,380 feet southeast of the site on Oleander Avenue; and

• Citrus High School approximately 1,620 feet southeast of the site on Cyprus Avenue, adjacent to the Fontana Adult School." (p. 47)"

As demonstrated above, the Jurupa Hills High school is located approximately 700 feet, or 0.13 miles, from the Project site; the Fontana Adult School is located 1,380 feet, or 0.26 miles, from the Project site; and the Citrus High School is located 1,620 feet, or 0.31 miles, from the Project site. Therefore, there are three schools within an approximately 0.5-mile radius of the Project. This 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 contribute to detrimental short-term and long-term health impacts that warehouses pose on local children if approved.

An EIR should be prepared to evaluate the Project's contribution to the disproportionate impacts that warehouses pose on the surrounding communities, including an analysis of the impact on children and people of color who live and attend school in the surrounding 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 analysis should prepare a revised cumulative health risk analysis ("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").[31]

Diesel Particulate Matter Emissions Inadequately Evaluated

The IS/MND concludes that the proposed Project would result in a less-than-significant health risk impact based on a quantified construction and operational HRA, as detailed in the HRA Report. Specifically, the HRA Report estimates that the maximum cancer risk posed to nearby, existing residential sensitive receptors associated with construction and operation would be 0.8 in one million, which would not exceed the SCAQMD significance threshold of 10 in one million (Appendix A-1, p. 55, Table 4.3-6).

[31] "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.

Table 4.3-6
Project-Related Cancer Risks

Receptor	UTM Location		Annual Average DPM Concentration (µg/m^3)		Excess Cancer Risk (per million population)		
	East	North	Construction (Year 1)	Operation (Years 2-30)	Construction	Operational	Total
PMI	458374.96	3769439.31	0.00505	0.00034	--	--	--
MEIR	458554.96	3769399.31	0.00443	0.00029	0.7	0.1	0.8
MEIW	458262.9	3769033.16	0.00018	0.00014	<0.1	<0.1	<0.1
Source: Table 4-17, MIG 2023a (Appendix A)							

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 two reasons.

First, the IS/MND's HRAs are unreliable, as they rely upon emissions estimates from a flawed air model, as discussed above in the section titled "Unsubstantiated Input Parameters Used to Estimate Project Emissions." As such, the HRAs are based on potentially underestimated DPM concentrations to calculate the health risk associated with Project construction. As a result, the IS/MND's HRAs and resulting cancer risk should not be relied upon to determine Project significance.

Second, the IS/MND's operational HRA underestimates the Fraction of Time At Home ("FAH") values for the third trimester, infant, and child receptors. Specifically, the HRA Report utilizes an FAH value of 0.85 for the third trimester (age -0.25 to 0) and infant (age 0 to 2) receptors, and an FAH value of 0.72 for the child receptors (age 2 to 16) (see excerpt below) (Appendix A-1, pp. 1427).

Risk Parameter Values by Age Bin

Variable	Residential Age Bin				
	3rd Trimester	0-2 Years	2-16 Years	16-30 Years	30-70 Years
DBR	361	1090	572	261	233
A	1	1	1	1	1
EF	0.96	0.96	0.96	0.96	0.96
CF	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06
CPF	1.1	1.1	1.1	1.1	1.1
ASF	10	10	3	1	1
ED	0.25	2	14	14	54
AT	70	70	70	70	70
FAH	0.85	0.85	0.72	0.73	0.73

However, the FAH values used for the third trimester, infant, and childhood receptors are incorrect, as SCAQMD guidance clearly states:

> "For Tiers 1, 2, and 3 screening purposes, the FAH is assumed to be 1 for ages third trimester to 16. As a default, children are assumed to attend a daycare or school in close proximity to their home and no discount should be taken for time spent outside of the area affected by the

facility's emissions. People older than age 16 are assumed to spend only 73 percent of their time at home."[32]

Per SCAQMD guidance, the HRA Report should have used an FAH of 1 for the third trimester, infant, and child receptors. By relying on incorrect FAH values, the IS/MND underestimates the cancer risk posed to nearby, existing sensitive receptors as a result of the Project operation. An updated HRA should be prepared that accurately accounts for FAH values, and consequently assesses the health risk impacts the Project poses to nearby sensitive receptors.

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 2,464.5 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year") (see excerpt below) (Appendix H-2, p. 6-5, Table 6-3).

[32] "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.

Table 6-3: Project Operational GHG Emissions (Unmitigated)					
Emission Source	GHG Emissions (MT / Year)				
	CO_2	CH_4	N_2O	Refrigerant (CO_2e)	CO_2e
Project Emissions					
Mobile	1,769.0	0.1	0.2	2.7	1,824.0
Area	7.3	<0.1	<0.1	0.0	7.3
Energy	815.0	0.1	<0.1	0.0	819.0
Water	5.2	0.1	<0.1	0.0	8.3
Waste	30.2	3.0	0.0	0.0	106.0
Refrigerants	0.0	0.0	0.0	<0.1	<0.1
Off-road	10.3	<0.1	<0.1	0.0	10.4
Amortized Construction	8.4	<0.1	<0.1	0.2	8.6
Site Subtotal[A]	2,645.4	3.3	0.2	2.7	2,783.6
Existing Site Emissions[B]					
Mobile	165.0	<0.1	<0.1	0.3	168.0
Area	4.9	<0.1	<0.1	0.0	5.0
Energy	136.0	<0.1	<0.1	0.0	137.0
Water	3.8	<0.1	<0.1	0.0	4.4
Waste	1.3	0.1	0.0	0.0	4.6
Refrigerants	0.0	0.0	0.0	<0.1	<0.1
Total Existing Site Emissions[A]	311.0	0.2	<0.1	0.3	319.1
Total Net Change					
Total Project Emissions[A]	2,324.5	3.1	0.2	2.3	2,464.5
				GHG Threshold	***3,000***
				Threshold Exceeded?	***No***

Source: MIG 2023 (see Appendix A).
(A) Totals may not equal due to rounding.
(B) This emissions estimate is based on the existing land uses at the site that have operated in the recent past. This approach is consistent with the trip generation estimate prepared for the Project by Ganddini.

As such, the IS/MND concludes:

> "As shown in Table 6-3, the proposed Project's potential increase in GHG emissions would be approximately 2,465 MTCO2e, which would be below 3,000 MTCO2e threshold employed by the City for evaluating the significance of the Project's GHG emissions" (Appendix H-2, p. 6-5).

However, the IS/MND's analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for three reasons:

(1) The IS/MND's quantitative GHG analysis relies upon a flawed air model;
(2) The IS/MND's quantitative GHG analysis relies upon an outdated threshold; and
(3) The IS/MND's unsubstantiated air model indicates a potentially significant impact.

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the IS/MND estimates that the Project would generate net annual GHG emissions of 2,464.5 MT CO_2e/year (Appendix H-2, p. 6-5, Table 6-3). However, the IS/MND's quantitative analysis is unsubstantiated. As previously discussed, when reviewing the Project's CalEEMod models, provided in the AQ & HRA Report and GHG Report, we found that several of the values inputted into the models are not consistent with information disclosed in the IS/MND. As a result, the models may underestimate the Project's emissions, and the IS/MND's quantitative analysis should not be relied upon to determine Project significance. An EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the environment.

2) 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 2,464.5 MT CO_2e/year, which would not exceed the SCAQMD threshold of 3,000 MT CO_2e/year (p. 49). 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 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.[33] 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."[34]

As it is currently March 2024, 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.[35]

3) 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 GHG Analysis, to the SCAQMD 2035 efficiency target of 3.0 MT

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[33] "Health & Safety Code 38550." California State Legislature, January 2007, *available at:* https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=38550.

[34] "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.

[35] "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.

CO_2e/SP/year. When applying this threshold, the Project's incorrect and unsubstantiated 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 2,464.5MT CO_2e/year (p. 49, Table 10). 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."[36] According to the *Employment Density Study Summary Report* completed by the Southern California Association of Governments ("SCAG"), the project would support approximately 297 employees.[37, 38] As the project is not expected to support any residential land uses, we estimate an SP of 297 people. When dividing the Project's net annual GHG emissions, as estimated by the IS/MND, by an SP of 297 people, we find that the Project would emit approximately 8.3 MT CO_2e/SP/year (see table below).[39]

Project Greenhouse Gas Emissions	
Annual Emissions (MT CO_2e/year)	2,464.5
Service Population	297
Service Population Efficiency (MT CO_2e/SP/year)	8.3
SCAQMD 2035 Target	**3.0**
Exceeds?	***Yes***

As demonstrated above, the Project's service population efficiency value 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 and incorporating additional mitigation measures to reduce the Project's GHG emissions to less-than-significant levels.

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant air quality, health risk, and GHG impacts that should be mitigated further. In an effort to reduce emissions, the Project should

[36] "CEQA & Climate Change." California Air Pollution Control Officers Association (CAPCOA), January 2008, *available at: https://www.ourair.org/wp-content/uploads/CAPCOA-CEQA-and-Climate-Change.pdf.*, p. 71-72.
[37] Calculated: (355,000 -SF warehouse) / (1,195-SF average per one warehouse employee in San Bernardino County) = 297.1 employees.
[38] "Employment Density Study Summary Report." Southern California Association of Governments (SCAG), October 2001, *available at:* https://docplayer.net/30300085-Employment-density-study-summary-report-october-31-prepared-for-southern-california-association-of-governments.html, p. 4.
[39] Calculated: (2,464.5 MT CO_2e/year) / (297 service population) = (8.3 MT CO_2e/SP/year).

consider the implementation of the following mitigation measures found in the California DOJ Warehouse Project Best Practices document.[40]

- 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.

[40] "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.

- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity that is equal to or greater than the building's projected energy needs, including all electrical chargers.
- Designing all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.
- Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide refrigerated warehouse space, constructing electric plugs for electric transport refrigeration units at every dock door and requiring truck operators with transport refrigeration units to use the electric plugs when at loading docks.
- Oversizing electrical rooms by 25 percent or providing a secondary electrical room to accommodate future expansion of electric vehicle charging capability.
- Constructing and maintaining electric light-duty vehicle charging stations proportional to the number of employee parking spaces (for example, requiring at least 10% of all employee parking spaces to be equipped with electric vehicle charging stations of at least Level 2 charging performance)
- Running conduit to an additional proportion of employee parking spaces for a future increase in the number of electric light-duty charging stations.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.

- Designing to LEED green building certification standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.
- Posting signs at every truck exit driveway providing directional information to the truck route.
- Improving and maintaining vegetation and tree canopy for residents in and around the project area.
- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants who own, operate, or hire trucking carriers with more than 100 trucks to use carriers that are SmartWay carriers.
- Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

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

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 that the energy mix that will charge the batteries and power electrical equipment must be 100% renewable energy resources. Until the feasibility of charging the batteries with renewable energy resources only is evaluated, 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 the maximum extent feasible. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's potentially 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.

Sincerely,

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

Paul E. Rosenfeld, Ph.D.

Attachment A: SWAPE's CalEEMod Output Files
Attachment B: Matt Hagemann CV
Attachment C: Paul Rosenfeld CV

Attachment A

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

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric)

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.50	1000sqft	0.13	5,500.00	0
Unrefrigerated Warehouse-No Rail	355.00	1000sqft	8.15	355,000.00	0
Parking Lot	110.00	Space	7.85	86.11	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2025
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

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

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

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

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

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

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

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

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

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

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

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

Trips and VMT - See comment on: "Unsubstantiated Changes to Construction Trips and VMT Input Parameters".

Demolition - Consistent with IS/MND's model.

Grading - Consistent with IS/MND's model.

Architectural Coating - See comment on: "Unsubstantiated Changes to Architectural Coating Emission Factors".

Energy Use - See comment on: "Incorrect Changes to Natural Gas Values".

Fleet Mix - See comment on: "Unsubstantiated Changes to Operational Fleet Mix Percentages".

Operational Off-Road Equipment - Consistent with IS/MND's model.

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

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

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	300.00	160.00
tblConstructionPhase	NumDays	20.00	10.00
tblLandUse	LandUseSquareFeet	44,000.00	86.11

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

tblLandUse	LotAcreage	0.99	7.85
tblTripsAndVMT	HaulingTripNumber	0.00	534.00
tblVehicleTrips	ST_TR	2.21	77.27
tblVehicleTrips	ST_TR	1.74	0.23
tblVehicleTrips	SU_TR	0.70	77.27
tblVehicleTrips	SU_TR	1.74	0.23
tblVehicleTrips	WD_TR	9.74	77.27
tblVehicleTrips	WD_TR	1.74	0.23

2.0 Emissions Summary

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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					
2024	0.2642	2.2033	2.5368	5.9600e-003	0.4374	0.0895	0.5269	0.1566	0.0835	0.2401	0.0000	534.3742	534.3742	0.0940	0.0181	542.1028
2025	1.6742	0.0151	0.0331	7.0000e-005	4.1100e-003	6.6000e-004	4.7700e-003	1.0900e-003	6.6000e-004	1.7500e-003	0.0000	6.1661	6.1661	2.4000e-004	8.0000e-005	6.1945
Maximum	**1.6742**	**2.2033**	**2.5368**	**5.9600e-003**	**0.4374**	**0.0895**	**0.5269**	**0.1566**	**0.0835**	**0.2401**	**0.0000**	**534.3742**	**534.3742**	**0.0940**	**0.0181**	**542.1028**

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					
2024	0.2642	2.2033	2.5368	5.9600e-003	0.4374	0.0895	0.5269	0.1566	0.0835	0.2401	0.0000	534.3738	534.3738	0.0940	0.0181	542.1024
2025	1.6742	0.0151	0.0331	7.0000e-005	4.1100e-003	6.6000e-004	4.7700e-003	1.0900e-003	6.6000e-004	1.7500e-003	0.0000	6.1661	6.1661	2.4000e-004	8.0000e-005	6.1945
Maximum	**1.6742**	**2.2033**	**2.5368**	**5.9600e-003**	**0.4374**	**0.0895**	**0.5269**	**0.1566**	**0.0835**	**0.2401**	**0.0000**	**534.3738**	**534.3738**	**0.0940**	**0.0181**	**542.1024**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2024**	**3-31-2024**	1.0034	1.0034
2	**4-1-2024**	**6-30-2024**	0.6461	0.6461
3	**7-1-2024**	**9-30-2024**	0.5893	0.5893
4	**10-1-2024**	**12-31-2024**	0.2062	0.2062
6	**4-1-2025**	**6-30-2025**	0.0965	0.0965
7	**7-1-2025**	**9-30-2025**	1.5445	1.5445
		Highest	1.5445	1.5445

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4703	5.0000e-005	5.9900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0117	0.0117	3.0000e-005	0.0000	0.0124
Energy	3.9500e-003	0.0359	0.0302	2.2000e-004		2.7300e-003	2.7300e-003		2.7300e-003	2.7300e-003	0.0000	39.0845	39.0845	7.5000e-004	7.2000e-004	39.3167
Mobile	0.2498	0.3948	2.6056	5.9600e-003	0.6453	4.7400e-003	0.6500	0.1724	4.4400e-003	0.1768	0.0000	551.6889	551.6889	0.0311	0.0277	560.7271
Waste						0.0000	0.0000		0.0000	0.0000	68.7774	0.0000	68.7774	4.0646	0.0000	170.3931
Water						0.0000	0.0000		0.0000	0.0000	26.3547	0.0000	26.3547	2.7069	0.0639	113.0734
Total	**1.7240**	**0.4307**	**2.6418**	**6.1800e-003**	**0.6453**	**7.4900e-003**	**0.6528**	**0.1724**	**7.1900e-003**	**0.1795**	**95.1321**	**590.7850**	**685.9171**	**6.8034**	**0.0924**	**883.5227**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

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	1.4703	5.0000e-005	5.9900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0117	0.0117	3.0000e-005	0.0000	0.0124
Energy	3.9500e-003	0.0359	0.0302	2.2000e-004		2.7300e-003	2.7300e-003		2.7300e-003	2.7300e-003	0.0000	39.0845	39.0845	7.5000e-004	7.2000e-004	39.3167
Mobile	0.2498	0.3948	2.6056	5.9600e-003	0.6453	4.7400e-003	0.6500	0.1724	4.4400e-003	0.1768	0.0000	551.6889	551.6889	0.0311	0.0277	560.7271
Waste						0.0000	0.0000		0.0000	0.0000	68.7774	0.0000	68.7774	4.0646	0.0000	170.3931
Water						0.0000	0.0000		0.0000	0.0000	26.3547	0.0000	26.3547	2.7069	0.0639	113.0734
Total	**1.7240**	**0.4307**	**2.6418**	**6.1800e-003**	**0.6453**	**7.4900e-003**	**0.6528**	**0.1724**	**7.1900e-003**	**0.1795**	**95.1321**	**590.7850**	**685.9171**	**6.8034**	**0.0924**	**883.5227**

	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	1/1/2024	1/26/2024	5	20	
2	Site Preparation	Site Preparation	1/27/2024	2/9/2024	5	10	
3	Grading	Grading	2/10/2024	3/22/2024	5	30	

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

4	Building Construction	Building Construction	3/23/2024	11/1/2024	5	160	
5	Paving	Paving	6/15/2024	6/28/2024	5	10	
6	Architectural Coating	Architectural Coating	6/29/2025	8/1/2025	5	25	
7	Trenching	Trenching	3/23/2024	6/14/2024	5	60	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 7.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 540,750; Non-Residential Outdoor: 180,250; Striped Parking Area: 5 (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	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42

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

Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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	6	15.00	0.00	235.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	534.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	151.00	59.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching			0.00	0.00	14.70	6.90				

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 Not Applied

3.2 Demolition - 2024

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					0.0255	0.0000	0.0255	3.8600e-003	0.0000	3.8600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0224	0.2088	0.1971	3.9000e-004		9.6000e-003	9.6000e-003		8.9200e-003	8.9200e-003	0.0000	33.9961	33.9961	9.5100e-003	0.0000	34.2338
Total	**0.0224**	**0.2088**	**0.1971**	**3.9000e-004**	**0.0255**	**9.6000e-003**	**0.0351**	**3.8600e-003**	**8.9200e-003**	**0.0128**	**0.0000**	**33.9961**	**33.9961**	**9.5100e-003**	**0.0000**	**34.2338**

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	2.7000e-004	0.0137	3.9800e-003	6.0000e-005	2.0200e-003	1.3000e-004	2.1600e-003	5.6000e-004	1.3000e-004	6.8000e-004	0.0000	6.4162	6.4162	2.7000e-004	1.0200e-003	6.7260
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	4.9000e-004	3.5000e-004	4.5300e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.2318	1.2318	3.0000e-005	3.0000e-005	1.2422
Total	**7.6000e-004**	**0.0141**	**8.5100e-003**	**7.0000e-005**	**3.6600e-003**	**1.4000e-004**	**3.8100e-003**	**1.0000e-003**	**1.4000e-004**	**1.1200e-003**	**0.0000**	**7.6480**	**7.6480**	**3.0000e-004**	**1.0500e-003**	**7.9682**

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

3.2 Demolition - 2024

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					0.0255	0.0000	0.0255	3.8600e-003	0.0000	3.8600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0224	0.2088	0.1971	3.9000e-004		9.6000e-003	9.6000e-003		8.9200e-003	8.9200e-003	0.0000	33.9960	33.9960	9.5100e-003	0.0000	34.2338
Total	**0.0224**	**0.2088**	**0.1971**	**3.9000e-004**	**0.0255**	**9.6000e-003**	**0.0351**	**3.8600e-003**	**8.9200e-003**	**0.0128**	**0.0000**	**33.9960**	**33.9960**	**9.5100e-003**	**0.0000**	**34.2338**

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	2.7000e-004	0.0137	3.9800e-003	6.0000e-005	2.0200e-003	1.3000e-004	2.1600e-003	5.6000e-004	1.3000e-004	6.8000e-004	0.0000	6.4162	6.4162	2.7000e-004	1.0200e-003	6.7260
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	4.9000e-004	3.5000e-004	4.5300e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.2318	1.2318	3.0000e-005	3.0000e-005	1.2422
Total	**7.6000e-004**	**0.0141**	**8.5100e-003**	**7.0000e-005**	**3.6600e-003**	**1.4000e-004**	**3.8100e-003**	**1.0000e-003**	**1.4000e-004**	**1.1200e-003**	**0.0000**	**7.6480**	**7.6480**	**3.0000e-004**	**1.0500e-003**	**7.9682**

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

3.3 Site Preparation - 2024

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					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e-004		6.1500e-003	6.1500e-003		5.6600e-003	5.6600e-003	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	**0.0133**	**0.1359**	**0.0917**	**1.9000e-004**	**0.0983**	**6.1500e-003**	**0.1044**	**0.0505**	**5.6600e-003**	**0.0562**	**0.0000**	**16.7285**	**16.7285**	**5.4100e-003**	**0.0000**	**16.8638**

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	2.9000e-004	2.1000e-004	2.7200e-003	1.0000e-005	9.9000e-004	0.0000	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7391	0.7391	2.0000e-005	2.0000e-005	0.7453
Total	**2.9000e-004**	**2.1000e-004**	**2.7200e-003**	**1.0000e-005**	**9.9000e-004**	**0.0000**	**9.9000e-004**	**2.6000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**0.7391**	**0.7391**	**2.0000e-005**	**2.0000e-005**	**0.7453**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

3.3 Site Preparation - 2024

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					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e-004		6.1500e-003	6.1500e-003		5.6500e-003	5.6500e-003	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	**0.0133**	**0.1359**	**0.0917**	**1.9000e-004**	**0.0983**	**6.1500e-003**	**0.1044**	**0.0505**	**5.6500e-003**	**0.0562**	**0.0000**	**16.7285**	**16.7285**	**5.4100e-003**	**0.0000**	**16.8638**

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	2.9000e-004	2.1000e-004	2.7200e-003	1.0000e-005	9.9000e-004	0.0000	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7391	0.7391	2.0000e-005	2.0000e-005	0.7453
Total	**2.9000e-004**	**2.1000e-004**	**2.7200e-003**	**1.0000e-005**	**9.9000e-004**	**0.0000**	**9.9000e-004**	**2.6000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**0.7391**	**0.7391**	**2.0000e-005**	**2.0000e-005**	**0.7453**

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

3.4 Grading - 2024

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					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0483	0.4857	0.4158	9.3000e-004		0.0200	0.0200		0.0184	0.0184	0.0000	81.7793	81.7793	0.0265	0.0000	82.4405
Total	**0.0483**	**0.4857**	**0.4158**	**9.3000e-004**	**0.1381**	**0.0200**	**0.1581**	**0.0548**	**0.0184**	**0.0732**	**0.0000**	**81.7793**	**81.7793**	**0.0265**	**0.0000**	**82.4405**

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	6.2000e-004	0.0312	9.0300e-003	1.5000e-004	4.6000e-003	3.1000e-004	4.9000e-003	1.2600e-003	2.9000e-004	1.5500e-003	0.0000	14.5797	14.5797	6.1000e-004	2.3100e-003	15.2837
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	9.7000e-004	6.9000e-004	9.0600e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	1.0000e-005	8.9000e-004	0.0000	2.4636	2.4636	6.0000e-005	6.0000e-005	2.4844
Total	**1.5900e-003**	**0.0319**	**0.0181**	**1.8000e-004**	**7.8900e-003**	**3.3000e-004**	**8.2100e-003**	**2.1300e-003**	**3.0000e-004**	**2.4400e-003**	**0.0000**	**17.0433**	**17.0433**	**6.7000e-004**	**2.3700e-003**	**17.7681**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

3.4 Grading - 2024

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					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0483	0.4857	0.4158	9.3000e-004		0.0200	0.0200		0.0184	0.0184	0.0000	81.7792	81.7792	0.0265	0.0000	82.4404
Total	**0.0483**	**0.4857**	**0.4158**	**9.3000e-004**	**0.1381**	**0.0200**	**0.1581**	**0.0548**	**0.0184**	**0.0732**	**0.0000**	**81.7792**	**81.7792**	**0.0265**	**0.0000**	**82.4404**

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	6.2000e-004	0.0312	9.0300e-003	1.5000e-004	4.6000e-003	3.1000e-004	4.9000e-003	1.2600e-003	2.9000e-004	1.5500e-003	0.0000	14.5797	14.5797	6.1000e-004	2.3100e-003	15.2837
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	9.7000e-004	6.9000e-004	9.0600e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	1.0000e-005	8.9000e-004	0.0000	2.4636	2.4636	6.0000e-005	6.0000e-005	2.4844
Total	**1.5900e-003**	**0.0319**	**0.0181**	**1.8000e-004**	**7.8900e-003**	**3.3000e-004**	**8.2100e-003**	**2.1300e-003**	**3.0000e-004**	**2.4400e-003**	**0.0000**	**17.0433**	**17.0433**	**6.7000e-004**	**2.3700e-003**	**17.7681**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

3.5 Building Construction - 2024

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	0.1177	1.0755	1.2934	2.1600e-003		0.0491	0.0491		0.0462	0.0462	0.0000	185.4793	185.4793	0.0439	0.0000	186.5758
Total	**0.1177**	**1.0755**	**1.2934**	**2.1600e-003**		**0.0491**	**0.0491**		**0.0462**	**0.0462**	**0.0000**	**185.4793**	**185.4793**	**0.0439**	**0.0000**	**186.5758**

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	5.2000e-003	0.1757	0.0693	8.3000e-004	0.0298	1.2300e-003	0.0310	8.5900e-003	1.1700e-003	9.7700e-003	0.0000	81.1290	81.1290	2.0800e-003	0.0120	84.7531
Worker	0.0391	0.0278	0.3648	1.0800e-003	0.1325	6.4000e-004	0.1331	0.0352	5.9000e-004	0.0358	0.0000	99.2025	99.2025	2.4600e-003	2.6000e-003	100.0389
Total	**0.0443**	**0.2035**	**0.4341**	**1.9100e-003**	**0.1622**	**1.8700e-003**	**0.1641**	**0.0438**	**1.7600e-003**	**0.0455**	**0.0000**	**180.3315**	**180.3315**	**4.5400e-003**	**0.0146**	**184.7920**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

3.5 Building Construction - 2024

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	0.1177	1.0755	1.2933	2.1600e-003		0.0491	0.0491		0.0462	0.0462	0.0000	185.4791	185.4791	0.0439	0.0000	186.5756
Total	**0.1177**	**1.0755**	**1.2933**	**2.1600e-003**		**0.0491**	**0.0491**		**0.0462**	**0.0462**	**0.0000**	**185.4791**	**185.4791**	**0.0439**	**0.0000**	**186.5756**

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	5.2000e-003	0.1757	0.0693	8.3000e-004	0.0298	1.2300e-003	0.0310	8.5900e-003	1.1700e-003	9.7700e-003	0.0000	81.1290	81.1290	2.0800e-003	0.0120	84.7531
Worker	0.0391	0.0278	0.3648	1.0800e-003	0.1325	6.4000e-004	0.1331	0.0352	5.9000e-004	0.0358	0.0000	99.2025	99.2025	2.4600e-003	2.6000e-003	100.0389
Total	**0.0443**	**0.2035**	**0.4341**	**1.9100e-003**	**0.1622**	**1.8700e-003**	**0.1641**	**0.0438**	**1.7600e-003**	**0.0455**	**0.0000**	**180.3315**	**180.3315**	**4.5400e-003**	**0.0146**	**184.7920**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

3.6 Paving - 2024

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	4.9400e-003	0.0476	0.0731	1.1000e-004		2.3400e-003	2.3400e-003		2.1600e-003	2.1600e-003	0.0000	10.0133	10.0133	3.2400e-003	0.0000	10.0942
Paving	0.0103					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0152**	**0.0476**	**0.0731**	**1.1000e-004**		**2.3400e-003**	**2.3400e-003**		**2.1600e-003**	**2.1600e-003**	**0.0000**	**10.0133**	**10.0133**	**3.2400e-003**	**0.0000**	**10.0942**

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	2.4000e-004	1.7000e-004	2.2600e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6159	0.6159	2.0000e-005	2.0000e-005	0.6211
Total	**2.4000e-004**	**1.7000e-004**	**2.2600e-003**	**1.0000e-005**	**8.2000e-004**	**0.0000**	**8.3000e-004**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6159**	**0.6159**	**2.0000e-005**	**2.0000e-005**	**0.6211**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

3.6 Paving - 2024

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	4.9400e-003	0.0476	0.0731	1.1000e-004		2.3400e-003	2.3400e-003		2.1600e-003	2.1600e-003	0.0000	10.0133	10.0133	3.2400e-003	0.0000	10.0942
Paving	0.0103					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0152**	**0.0476**	**0.0731**	**1.1000e-004**		**2.3400e-003**	**2.3400e-003**		**2.1600e-003**	**2.1600e-003**	**0.0000**	**10.0133**	**10.0133**	**3.2400e-003**	**0.0000**	**10.0942**

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	2.4000e-004	1.7000e-004	2.2600e-003	1.0000e-005	8.2000e-004	0.0000	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6159	0.6159	2.0000e-005	2.0000e-005	0.6211
Total	**2.4000e-004**	**1.7000e-004**	**2.2600e-003**	**1.0000e-005**	**8.2000e-004**	**0.0000**	**8.3000e-004**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6159**	**0.6159**	**2.0000e-005**	**2.0000e-005**	**0.6211**

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

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6709					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1400e-003	0.0143	0.0226	4.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	3.1916	3.1916	1.7000e-004	0.0000	3.1959
Total	**1.6731**	**0.0143**	**0.0226**	**4.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**3.1916**	**3.1916**	**1.7000e-004**	**0.0000**	**3.1959**

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	1.1300e-003	7.7000e-004	0.0105	3.0000e-005	4.1100e-003	2.0000e-005	4.1300e-003	1.0900e-003	2.0000e-005	1.1100e-003	0.0000	2.9745	2.9745	7.0000e-005	8.0000e-005	2.9986
Total	**1.1300e-003**	**7.7000e-004**	**0.0105**	**3.0000e-005**	**4.1100e-003**	**2.0000e-005**	**4.1300e-003**	**1.0900e-003**	**2.0000e-005**	**1.1100e-003**	**0.0000**	**2.9745**	**2.9745**	**7.0000e-005**	**8.0000e-005**	**2.9986**

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

3.7 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6709					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1400e-003	0.0143	0.0226	4.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	3.1916	3.1916	1.7000e-004	0.0000	3.1959
Total	**1.6731**	**0.0143**	**0.0226**	**4.0000e-005**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**3.1916**	**3.1916**	**1.7000e-004**	**0.0000**	**3.1959**

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	1.1300e-003	7.7000e-004	0.0105	3.0000e-005	4.1100e-003	2.0000e-005	4.1300e-003	1.0900e-003	2.0000e-005	1.1100e-003	0.0000	2.9745	2.9745	7.0000e-005	8.0000e-005	2.9986
Total	**1.1300e-003**	**7.7000e-004**	**0.0105**	**3.0000e-005**	**4.1100e-003**	**2.0000e-005**	**4.1300e-003**	**1.0900e-003**	**2.0000e-005**	**1.1100e-003**	**0.0000**	**2.9745**	**2.9745**	**7.0000e-005**	**8.0000e-005**	**2.9986**

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

3.8 Trenching - 2024

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
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
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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**

3.8 Trenching - 2024

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
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
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2498	0.3948	2.6056	5.9600e-003	0.6453	4.7400e-003	0.6500	0.1724	4.4400e-003	0.1768	0.0000	551.6889	551.6889	0.0311	0.0277	560.7271
Unmitigated	0.2498	0.3948	2.6056	5.9600e-003	0.6453	4.7400e-003	0.6500	0.1724	4.4400e-003	0.1768	0.0000	551.6889	551.6889	0.0311	0.0277	560.7271

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	424.99	424.99	424.99	1,369,073	1,369,073
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	79.88	79.88	79.88	342,322	342,322
Total	504.86	504.86	504.86	1,711,394	1,711,394

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
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
General Office Building	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606
Parking Lot	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606

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

Unrefrigerated Warehouse-No Rail	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	3.9500e-003	0.0359	0.0302	2.2000e-004		2.7300e-003	2.7300e-003		2.7300e-003	2.7300e-003	0.0000	39.0845	39.0845	7.5000e-004	7.2000e-004	39.3167
NaturalGas Unmitigated	3.9500e-003	0.0359	0.0302	2.2000e-004		2.7300e-003	2.7300e-003		2.7300e-003	2.7300e-003	0.0000	39.0845	39.0845	7.5000e-004	7.2000e-004	39.3167

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

5.2 Energy by Land Use - NaturalGas

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					
General Office Building	18865	1.0000e-004	9.2000e-004	7.8000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0067	1.0067	2.0000e-005	2.0000e-005	1.0127
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	713550	3.8500e-003	0.0350	0.0294	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	38.0778	38.0778	7.3000e-004	7.0000e-004	38.3040
Total		**3.9500e-003**	**0.0359**	**0.0302**	**2.2000e-004**		**2.7300e-003**	**2.7300e-003**		**2.7300e-003**	**2.7300e-003**	**0.0000**	**39.0845**	**39.0845**	**7.5000e-004**	**7.2000e-004**	**39.3167**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	18865	1.0000e-004	9.2000e-004	7.8000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0067	1.0067	2.0000e-005	2.0000e-005	1.0127
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	713550	3.8500e-003	0.0350	0.0294	2.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	38.0778	38.0778	7.3000e-004	7.0000e-004	38.3040
Total		**3.9500e-003**	**0.0359**	**0.0302**	**2.2000e-004**		**2.7300e-003**	**2.7300e-003**		**2.7300e-003**	**2.7300e-003**	**0.0000**	**39.0845**	**39.0845**	**7.5000e-004**	**7.2000e-004**	**39.3167**

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	50545	0.0000	0.0000	0.0000	0.0000
Parking Lot	30.1385	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	823600	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	50545	0.0000	0.0000	0.0000	0.0000
Parking Lot	30.1385	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	823600	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4703	5.0000e-005	5.9900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0117	0.0117	3.0000e-005	0.0000	0.0124
Unmitigated	1.4703	5.0000e-005	5.9900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0117	0.0117	3.0000e-005	0.0000	0.0124

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	0.1671					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3027					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.5000e-004	5.0000e-005	5.9900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0117	0.0117	3.0000e-005	0.0000	0.0124
Total	**1.4703**	**5.0000e-005**	**5.9900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0117**	**0.0117**	**3.0000e-005**	**0.0000**	**0.0124**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1671					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3027					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.5000e-004	5.0000e-005	5.9900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0117	0.0117	3.0000e-005	0.0000	0.0124
Total	**1.4703**	**5.0000e-005**	**5.9900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0117**	**0.0117**	**3.0000e-005**	**0.0000**	**0.0124**

7.0 Water Detail

7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	26.3547	2.7069	0.0639	113.0734
Unmitigated	26.3547	2.7069	0.0639	113.0734

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.977536 / 0.599135	0.3101	0.0319	7.5000e-004	1.3306
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	82.0938 / 0	26.0446	2.6750	0.0632	111.7428
Total		**26.3547**	**2.7069**	**0.0639**	**113.0734**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.977536 / 0.599135	0.3101	0.0319	7.5000e-004	1.3306
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	82.0938 / 0	26.0446	2.6750	0.0632	111.7428
Total		**26.3547**	**2.7069**	**0.0639**	**113.0734**

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 Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	68.7774	4.0646	0.0000	170.3931
Unmitigated	68.7774	4.0646	0.0000	170.3931

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	5.12	1.0393	0.0614	0.0000	2.5749
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	333.7	67.7381	4.0032	0.0000	167.8182
Total		**68.7774**	**4.0646**	**0.0000**	**170.3931**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Annual

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

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	5.12	1.0393	0.0614	0.0000	2.5749
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	333.7	67.7381	4.0032	0.0000	167.8182
Total		**68.7774**	**4.0646**	**0.0000**	**170.3931**

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 Not Applied

11.0 Vegetation

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

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric)

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.50	1000sqft	0.13	5,500.00	0
Unrefrigerated Warehouse-No Rail	355.00	1000sqft	8.15	355,000.00	0
Parking Lot	110.00	Space	7.85	86.11	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2025
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

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

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

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

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

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

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

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

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

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

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

Trips and VMT - See comment on: "Unsubstantiated Changes to Construction Trips and VMT Input Parameters".

Demolition - Consistent with IS/MND's model.

Grading - Consistent with IS/MND's model.

Architectural Coating - See comment on: "Unsubstantiated Changes to Architectural Coating Emission Factors".

Energy Use - See comment on: "Incorrect Changes to Natural Gas Values".

Fleet Mix - See comment on: "Unsubstantiated Changes to Operational Fleet Mix Percentages".

Operational Off-Road Equipment - Consistent with IS/MND's model.

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

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

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	300.00	160.00
tblConstructionPhase	NumDays	20.00	10.00
tblLandUse	LandUseSquareFeet	44,000.00	86.11

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

tblLandUse	LotAcreage	0.99	7.85
tblTripsAndVMT	HaulingTripNumber	0.00	534.00
tblVehicleTrips	ST_TR	2.21	77.27
tblVehicleTrips	ST_TR	1.74	0.23
tblVehicleTrips	SU_TR	0.70	77.27
tblVehicleTrips	SU_TR	1.74	0.23
tblVehicleTrips	WD_TR	9.74	77.27
tblVehicleTrips	WD_TR	1.74	0.23

2.0 Emissions Summary

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	5.1863	34.3831	37.4506	0.0763	19.8582	1.3568	21.0885	10.1558	1.2490	11.2877	0.0000	7,506.0463	7,506.0463	1.9932	0.2019	7,600.7911
2025	133.9465	1.2015	2.7808	5.7800e-003	0.3353	0.0530	0.3883	0.0889	0.0529	0.1418	0.0000	565.2404	565.2404	0.0213	6.2200e-003	567.6264
Maximum	**133.9465**	**34.3831**	**37.4506**	**0.0763**	**19.8582**	**1.3568**	**21.0885**	**10.1558**	**1.2490**	**11.2877**	**0.0000**	**7,506.0463**	**7,506.0463**	**1.9932**	**0.2019**	**7,600.7911**

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					
2024	5.1863	34.3831	37.4506	0.0763	19.8582	1.3568	21.0885	10.1558	1.2490	11.2877	0.0000	7,506.0463	7,506.0463	1.9932	0.2019	7,600.7911
2025	133.9465	1.2015	2.7808	5.7800e-003	0.3353	0.0530	0.3883	0.0889	0.0529	0.1418	0.0000	565.2404	565.2404	0.0213	6.2200e-003	567.6264
Maximum	**133.9465**	**34.3831**	**37.4506**	**0.0763**	**19.8582**	**1.3568**	**21.0885**	**10.1558**	**1.2490**	**11.2877**	**0.0000**	**7,506.0463**	**7,506.0463**	**1.9932**	**0.2019**	**7,600.7911**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

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

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.0579	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097
Energy	0.0216	0.1967	0.1653	1.1800e-003		0.0150	0.0150		0.0150	0.0150		236.0725	236.0725	4.5200e-003	4.3300e-003	237.4754
Mobile	1.5879	2.0025	15.3592	0.0348	3.6135	0.0261	3.6396	0.9637	0.0244	0.9881		3,550.7940	3,550.7940	0.1823	0.1617	3,603.5489
Total	**9.6675**	**2.1996**	**15.5724**	**0.0360**	**3.6135**	**0.0412**	**3.6547**	**0.9637**	**0.0395**	**1.0033**		**3,786.9695**	**3,786.9695**	**0.1871**	**0.1661**	**3,841.1340**

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	8.0579	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097
Energy	0.0216	0.1967	0.1653	1.1800e-003		0.0150	0.0150		0.0150	0.0150		236.0725	236.0725	4.5200e-003	4.3300e-003	237.4754
Mobile	1.5879	2.0025	15.3592	0.0348	3.6135	0.0261	3.6396	0.9637	0.0244	0.9881		3,550.7940	3,550.7940	0.1823	0.1617	3,603.5489
Total	**9.6675**	**2.1996**	**15.5724**	**0.0360**	**3.6135**	**0.0412**	**3.6547**	**0.9637**	**0.0395**	**1.0033**		**3,786.9695**	**3,786.9695**	**0.1871**	**0.1661**	**3,841.1340**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	1/26/2024	5	20	
2	Site Preparation	Site Preparation	1/27/2024	2/9/2024	5	10	
3	Grading	Grading	2/10/2024	3/22/2024	5	30	
4	Building Construction	Building Construction	3/23/2024	11/1/2024	5	160	
5	Paving	Paving	6/15/2024	6/28/2024	5	10	
6	Architectural Coating	Architectural Coating	6/29/2025	8/1/2025	5	25	
7	Trenching	Trenching	3/23/2024	6/14/2024	5	60	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 7.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 540,750; Non-Residential Outdoor: 180,250; Striped Parking Area: 5 (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	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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	6	15.00	0.00	235.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	534.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	151.00	59.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching			0.00	0.00	14.70	6.90				

3.1 Mitigation Measures Construction

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2024

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					2.5472	0.0000	2.5472	0.3857	0.0000	0.3857			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**2.5472**	**0.9602**	**3.5074**	**0.3857**	**0.8922**	**1.2779**		**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

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

3.2 Demolition - 2024

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	0.0281	1.2966	0.3946	6.4900e-003	0.2058	0.0134	0.2192	0.0564	0.0128	0.0693		706.8088	706.8088	0.0298	0.1120	740.9383
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	0.0544	0.0314	0.5245	1.4500e-003	0.1677	7.9000e-004	0.1685	0.0445	7.3000e-004	0.0452		146.9351	146.9351	3.3100e-003	3.3400e-003	148.0134
Total	**0.0825**	**1.3280**	**0.9191**	**7.9400e-003**	**0.3734**	**0.0142**	**0.3876**	**0.1009**	**0.0136**	**0.1144**		**853.7439**	**853.7439**	**0.0331**	**0.1154**	**888.9516**

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					2.5472	0.0000	2.5472	0.3857	0.0000	0.3857			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**2.5472**	**0.9602**	**3.5074**	**0.3857**	**0.8922**	**1.2779**	**0.0000**	**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

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

3.2 Demolition - 2024

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	0.0281	1.2966	0.3946	6.4900e-003	0.2058	0.0134	0.2192	0.0564	0.0128	0.0693		706.8088	706.8088	0.0298	0.1120	740.9383
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	0.0544	0.0314	0.5245	1.4500e-003	0.1677	7.9000e-004	0.1685	0.0445	7.3000e-004	0.0452		146.9351	146.9351	3.3100e-003	3.3400e-003	148.0134
Total	**0.0825**	**1.3280**	**0.9191**	**7.9400e-003**	**0.3734**	**0.0142**	**0.3876**	**0.1009**	**0.0136**	**0.1144**		**853.7439**	**853.7439**	**0.0331**	**0.1154**	**888.9516**

3.3 Site Preparation - 2024

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					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

3.3 Site Preparation - 2024

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	0.0653	0.0377	0.6294	1.7400e-003	0.2012	9.5000e-004	0.2022	0.0534	8.7000e-004	0.0542		176.3221	176.3221	3.9700e-003	4.0100e-003	177.6160
Total	**0.0653**	**0.0377**	**0.6294**	**1.7400e-003**	**0.2012**	**9.5000e-004**	**0.2022**	**0.0534**	**8.7000e-004**	**0.0542**		**176.3221**	**176.3221**	**3.9700e-003**	**4.0100e-003**	**177.6160**

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					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

3.3 Site Preparation - 2024

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	0.0653	0.0377	0.6294	1.7400e-003	0.2012	9.5000e-004	0.2022	0.0534	8.7000e-004	0.0542		176.3221	176.3221	3.9700e-003	4.0100e-003	177.6160
Total	**0.0653**	**0.0377**	**0.6294**	**1.7400e-003**	**0.2012**	**9.5000e-004**	**0.2022**	**0.0534**	**8.7000e-004**	**0.0542**		**176.3221**	**176.3221**	**3.9700e-003**	**4.0100e-003**	**177.6160**

3.4 Grading - 2024

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					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2036**	**1.3354**	**10.5390**	**3.6538**	**1.2286**	**4.8823**		**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

3.4 Grading - 2024

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	0.0425	1.9643	0.5978	9.8300e-003	0.3117	0.0203	0.3320	0.0855	0.0194	0.1049		1,070.7401	1,070.7401	0.0452	0.1697	1,122.4427
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	0.0726	0.0418	0.6993	1.9400e-003	0.2236	1.0600e-003	0.2246	0.0593	9.7000e-004	0.0603		195.9134	195.9134	4.4200e-003	4.4500e-003	197.3512
Total	**0.1151**	**2.0061**	**1.2971**	**0.0118**	**0.5353**	**0.0214**	**0.5566**	**0.1448**	**0.0204**	**0.1652**		**1,266.6535**	**1,266.6535**	**0.0496**	**0.1742**	**1,319.7938**

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					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2036**	**1.3354**	**10.5390**	**3.6538**	**1.2286**	**4.8823**	**0.0000**	**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

3.4 Grading - 2024

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	0.0425	1.9643	0.5978	9.8300e-003	0.3117	0.0203	0.3320	0.0855	0.0194	0.1049		1,070.7401	1,070.7401	0.0452	0.1697	1,122.4427
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	0.0726	0.0418	0.6993	1.9400e-003	0.2236	1.0600e-003	0.2246	0.0593	9.7000e-004	0.0603		195.9134	195.9134	4.4200e-003	4.4500e-003	197.3512
Total	**0.1151**	**2.0061**	**1.2971**	**0.0118**	**0.5353**	**0.0214**	**0.5566**	**0.1448**	**0.0204**	**0.1652**		**1,266.6535**	**1,266.6535**	**0.0496**	**0.1742**	**1,319.7938**

3.5 Building Construction - 2024

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

3.5 Building Construction - 2024

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	0.0675	2.0879	0.8539	0.0104	0.3780	0.0153	0.3933	0.1088	0.0147	0.1235		1,116.7188	1,116.7188	0.0287	0.1649	1,166.5726
Worker	0.5479	0.3159	5.2796	0.0146	1.6878	7.9700e-003	1.6958	0.4476	7.3400e-003	0.4550		1,479.1464	1,479.1464	0.0333	0.0336	1,490.0012
Total	**0.6154**	**2.4038**	**6.1336**	**0.0250**	**2.0658**	**0.0233**	**2.0891**	**0.5565**	**0.0220**	**0.5785**		**2,595.8652**	**2,595.8652**	**0.0620**	**0.1985**	**2,656.5737**

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

3.5 Building Construction - 2024

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	0.0675	2.0879	0.8539	0.0104	0.3780	0.0153	0.3933	0.1088	0.0147	0.1235		1,116.7188	1,116.7188	0.0287	0.1649	1,166.5726
Worker	0.5479	0.3159	5.2796	0.0146	1.6878	7.9700e-003	1.6958	0.4476	7.3400e-003	0.4550		1,479.1464	1,479.1464	0.0333	0.0336	1,490.0012
Total	**0.6154**	**2.4038**	**6.1336**	**0.0250**	**2.0658**	**0.0233**	**2.0891**	**0.5565**	**0.0220**	**0.5785**		**2,595.8652**	**2,595.8652**	**0.0620**	**0.1985**	**2,656.5737**

3.6 Paving - 2024

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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	2.0567					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.0449**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

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

3.6 Paving - 2024

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	0.0544	0.0314	0.5245	1.4500e-003	0.1677	7.9000e-004	0.1685	0.0445	7.3000e-004	0.0452		146.9351	146.9351	3.3100e-003	3.3400e-003	148.0134
Total	**0.0544**	**0.0314**	**0.5245**	**1.4500e-003**	**0.1677**	**7.9000e-004**	**0.1685**	**0.0445**	**7.3000e-004**	**0.0452**		**146.9351**	**146.9351**	**3.3100e-003**	**3.3400e-003**	**148.0134**

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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	2.0567					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.0449**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.6 Paving - 2024

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	0.0544	0.0314	0.5245	1.4500e-003	0.1677	7.9000e-004	0.1685	0.0445	7.3000e-004	0.0452		146.9351	146.9351	3.3100e-003	3.3400e-003	148.0134
Total	**0.0544**	**0.0314**	**0.5245**	**1.4500e-003**	**0.1677**	**7.9000e-004**	**0.1685**	**0.0445**	**7.3000e-004**	**0.0452**		**146.9351**	**146.9351**	**3.3100e-003**	**3.3400e-003**	**148.0134**

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	133.6743					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**133.8452**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

3.7 Architectural Coating - 2025

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	0.1013	0.0560	0.9717	2.8100e-003	0.3353	1.5000e-003	0.3368	0.0889	1.3800e-003	0.0903		283.7924	283.7924	5.9500e-003	6.2200e-003	285.7945
Total	**0.1013**	**0.0560**	**0.9717**	**2.8100e-003**	**0.3353**	**1.5000e-003**	**0.3368**	**0.0889**	**1.3800e-003**	**0.0903**		**283.7924**	**283.7924**	**5.9500e-003**	**6.2200e-003**	**285.7945**

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	133.6743					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**133.8452**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

3.7 Architectural Coating - 2025

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	0.1013	0.0560	0.9717	2.8100e-003	0.3353	1.5000e-003	0.3368	0.0889	1.3800e-003	0.0903		283.7924	283.7924	5.9500e-003	6.2200e-003	285.7945
Total	**0.1013**	**0.0560**	**0.9717**	**2.8100e-003**	**0.3353**	**1.5000e-003**	**0.3368**	**0.0889**	**1.3800e-003**	**0.0903**		**283.7924**	**283.7924**	**5.9500e-003**	**6.2200e-003**	**285.7945**

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

3.8 Trenching - 2024

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Total					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**			**0.0000**			**0.0000**

3.8 Trenching - 2024

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Total					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**			**0.0000**			**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5879	2.0025	15.3592	0.0348	3.6135	0.0261	3.6396	0.9637	0.0244	0.9881		3,550.7940	3,550.7940	0.1823	0.1617	3,603.5489
Unmitigated	1.5879	2.0025	15.3592	0.0348	3.6135	0.0261	3.6396	0.9637	0.0244	0.9881		3,550.7940	3,550.7940	0.1823	0.1617	3,603.5489

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	424.99	424.99	424.99	1,369,073	1,369,073
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	79.88	79.88	79.88	342,322	342,322
Total	504.86	504.86	504.86	1,711,394	1,711,394

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
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
General Office Building	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606
Parking Lot	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606

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

Unrefrigerated Warehouse-No Rail	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0216	0.1967	0.1653	1.1800e-003		0.0150	0.0150		0.0150	0.0150		236.0725	236.0725	4.5200e-003	4.3300e-003	237.4754
NaturalGas Unmitigated	0.0216	0.1967	0.1653	1.1800e-003		0.0150	0.0150		0.0150	0.0150		236.0725	236.0725	4.5200e-003	4.3300e-003	237.4754

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

5.2 Energy by Land Use - NaturalGas

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					
General Office Building	51.6849	5.6000e-004	5.0700e-003	4.2600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.0806	6.0806	1.2000e-004	1.1000e-004	6.1167
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	1954.93	0.0211	0.1917	0.1610	1.1500e-003		0.0146	0.0146		0.0146	0.0146		229.9919	229.9919	4.4100e-003	4.2200e-003	231.3587
Total		**0.0216**	**0.1967**	**0.1653**	**1.1800e-003**		**0.0150**	**0.0150**		**0.0150**	**0.0150**		**236.0725**	**236.0725**	**4.5300e-003**	**4.3300e-003**	**237.4754**

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					
General Office Building	0.0516849	5.6000e-004	5.0700e-003	4.2600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.0806	6.0806	1.2000e-004	1.1000e-004	6.1167
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	1.95493	0.0211	0.1917	0.1610	1.1500e-003		0.0146	0.0146		0.0146	0.0146		229.9919	229.9919	4.4100e-003	4.2200e-003	231.3587
Total		**0.0216**	**0.1967**	**0.1653**	**1.1800e-003**		**0.0150**	**0.0150**		**0.0150**	**0.0150**		**236.0725**	**236.0725**	**4.5300e-003**	**4.3300e-003**	**237.4754**

6.0 Area Detail

6.1 Mitigation Measures Area

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.0579	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097
Unmitigated	8.0579	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097

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	0.9156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.1379					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4100e-003	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097
Total	**8.0579**	**4.3000e-004**	**0.0479**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**0.1030**	**0.1030**	**2.7000e-004**		**0.1097**

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	0.9156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.1379					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4100e-003	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097
Total	**8.0579**	**4.3000e-004**	**0.0479**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**0.1030**	**0.1030**	**2.7000e-004**		**0.1097**

7.0 Water Detail

7.1 Mitigation Measures Water

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric)

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.50	1000sqft	0.13	5,500.00	0
Unrefrigerated Warehouse-No Rail	355.00	1000sqft	8.15	355,000.00	0
Parking Lot	110.00	Space	7.85	86.11	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2025
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

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

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

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

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

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

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

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

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

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

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

Trips and VMT - See comment on: "Unsubstantiated Changes to Construction Trips and VMT Input Parameters".

Demolition - Consistent with IS/MND's model.

Grading - Consistent with IS/MND's model.

Architectural Coating - See comment on: "Unsubstantiated Changes to Architectural Coating Emission Factors".

Energy Use - See comment on: "Incorrect Changes to Natural Gas Values".

Fleet Mix - See comment on: "Unsubstantiated Changes to Operational Fleet Mix Percentages".

Operational Off-Road Equipment - Consistent with IS/MND's model.

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

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

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	300.00	160.00
tblConstructionPhase	NumDays	20.00	10.00
tblLandUse	LandUseSquareFeet	44,000.00	86.11

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

tblLandUse	LotAcreage	0.99	7.85
tblTripsAndVMT	HaulingTripNumber	0.00	534.00
tblVehicleTrips	ST_TR	2.21	77.27
tblVehicleTrips	ST_TR	1.74	0.23
tblVehicleTrips	SU_TR	0.70	77.27
tblVehicleTrips	SU_TR	1.74	0.23
tblVehicleTrips	WD_TR	9.74	77.27
tblVehicleTrips	WD_TR	1.74	0.23

2.0 Emissions Summary

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	5.1608	34.4915	36.4555	0.0748	19.8582	1.3568	21.0885	10.1558	1.2490	11.2877	0.0000	7,356.2182	7,356.2182	1.9931	0.2036	7,451.4617
2025	133.9432	1.2043	2.6108	5.5100e-003	0.3353	0.0530	0.3883	0.0889	0.0529	0.1418	0.0000	538.6785	538.6785	0.0213	6.4200e-003	541.1238
Maximum	**133.9432**	**34.4915**	**36.4555**	**0.0748**	**19.8582**	**1.3568**	**21.0885**	**10.1558**	**1.2490**	**11.2877**	**0.0000**	**7,356.2182**	**7,356.2182**	**1.9931**	**0.2036**	**7,451.4617**

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					
2024	5.1608	34.4915	36.4555	0.0748	19.8582	1.3568	21.0885	10.1558	1.2490	11.2877	0.0000	7,356.2182	7,356.2182	1.9931	0.2036	7,451.4617
2025	133.9432	1.2043	2.6108	5.5100e-003	0.3353	0.0530	0.3883	0.0889	0.0529	0.1418	0.0000	538.6785	538.6785	0.0213	6.4200e-003	541.1238
Maximum	**133.9432**	**34.4915**	**36.4555**	**0.0748**	**19.8582**	**1.3568**	**21.0885**	**10.1558**	**1.2490**	**11.2877**	**0.0000**	**7,356.2182**	**7,356.2182**	**1.9931**	**0.2036**	**7,451.4617**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

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

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.0579	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097
Energy	0.0216	0.1967	0.1653	1.1800e-003		0.0150	0.0150		0.0150	0.0150		236.0725	236.0725	4.5200e-003	4.3300e-003	237.4754
Mobile	1.3825	2.1278	13.7484	0.0323	3.6135	0.0261	3.6396	0.9637	0.0244	0.9881		3,296.7542	3,296.7542	0.1866	0.1657	3,350.7961
Total	**9.4621**	**2.3250**	**13.9616**	**0.0335**	**3.6135**	**0.0412**	**3.6547**	**0.9637**	**0.0396**	**1.0033**		**3,532.9297**	**3,532.9297**	**0.1914**	**0.1700**	**3,588.3811**

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	8.0579	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097
Energy	0.0216	0.1967	0.1653	1.1800e-003		0.0150	0.0150		0.0150	0.0150		236.0725	236.0725	4.5200e-003	4.3300e-003	237.4754
Mobile	1.3825	2.1278	13.7484	0.0323	3.6135	0.0261	3.6396	0.9637	0.0244	0.9881		3,296.7542	3,296.7542	0.1866	0.1657	3,350.7961
Total	**9.4621**	**2.3250**	**13.9616**	**0.0335**	**3.6135**	**0.0412**	**3.6547**	**0.9637**	**0.0396**	**1.0033**		**3,532.9297**	**3,532.9297**	**0.1914**	**0.1700**	**3,588.3811**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	1/26/2024	5	20	
2	Site Preparation	Site Preparation	1/27/2024	2/9/2024	5	10	
3	Grading	Grading	2/10/2024	3/22/2024	5	30	
4	Building Construction	Building Construction	3/23/2024	11/1/2024	5	160	
5	Paving	Paving	6/15/2024	6/28/2024	5	10	
6	Architectural Coating	Architectural Coating	6/29/2025	8/1/2025	5	25	
7	Trenching	Trenching	3/23/2024	6/14/2024	5	60	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 7.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 540,750; Non-Residential Outdoor: 180,250; Striped Parking Area: 5 (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	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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	6	15.00	0.00	235.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	534.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	151.00	59.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching			0.00	0.00	14.70	6.90				

3.1 Mitigation Measures Construction

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2024

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					2.5472	0.0000	2.5472	0.3857	0.0000	0.3857			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**2.5472**	**0.9602**	**3.5074**	**0.3857**	**0.8922**	**1.2779**		**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

3.2 Demolition - 2024

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	0.0259	1.3668	0.4017	6.5000e-003	0.2058	0.0134	0.2192	0.0564	0.0129	0.0693		707.8832	707.8832	0.0297	0.1122	742.0607
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	0.0526	0.0330	0.4321	1.3200e-003	0.1677	7.9000e-004	0.1685	0.0445	7.3000e-004	0.0452		133.1498	133.1498	3.3200e-003	3.4500e-003	134.2600
Total	**0.0785**	**1.3998**	**0.8338**	**7.8200e-003**	**0.3734**	**0.0142**	**0.3877**	**0.1009**	**0.0136**	**0.1145**		**841.0330**	**841.0330**	**0.0330**	**0.1157**	**876.3206**

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					2.5472	0.0000	2.5472	0.3857	0.0000	0.3857			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
Total	**2.2437**	**20.8781**	**19.7073**	**0.0388**	**2.5472**	**0.9602**	**3.5074**	**0.3857**	**0.8922**	**1.2779**	**0.0000**	**3,747.4228**	**3,747.4228**	**1.0485**		**3,773.6345**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

3.2 Demolition - 2024

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	0.0259	1.3668	0.4017	6.5000e-003	0.2058	0.0134	0.2192	0.0564	0.0129	0.0693		707.8832	707.8832	0.0297	0.1122	742.0607
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	0.0526	0.0330	0.4321	1.3200e-003	0.1677	7.9000e-004	0.1685	0.0445	7.3000e-004	0.0452		133.1498	133.1498	3.3200e-003	3.4500e-003	134.2600
Total	**0.0785**	**1.3998**	**0.8338**	**7.8200e-003**	**0.3734**	**0.0142**	**0.3877**	**0.1009**	**0.0136**	**0.1145**		**841.0330**	**841.0330**	**0.0330**	**0.1157**	**876.3206**

3.3 Site Preparation - 2024

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					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

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

3.3 Site Preparation - 2024

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	0.0631	0.0396	0.5186	1.5800e-003	0.2012	9.5000e-004	0.2022	0.0534	8.7000e-004	0.0542		159.7797	159.7797	3.9900e-003	4.1400e-003	161.1120
Total	**0.0631**	**0.0396**	**0.5186**	**1.5800e-003**	**0.2012**	**9.5000e-004**	**0.2022**	**0.0534**	**8.7000e-004**	**0.0542**		**159.7797**	**159.7797**	**3.9900e-003**	**4.1400e-003**	**161.1120**

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					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

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

3.3 Site Preparation - 2024

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	0.0631	0.0396	0.5186	1.5800e-003	0.2012	9.5000e-004	0.2022	0.0534	8.7000e-004	0.0542		159.7797	159.7797	3.9900e-003	4.1400e-003	161.1120
Total	**0.0631**	**0.0396**	**0.5186**	**1.5800e-003**	**0.2012**	**9.5000e-004**	**0.2022**	**0.0534**	**8.7000e-004**	**0.0542**		**159.7797**	**159.7797**	**3.9900e-003**	**4.1400e-003**	**161.1120**

3.4 Grading - 2024

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					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2036**	**1.3354**	**10.5390**	**3.6538**	**1.2286**	**4.8823**		**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

3.4 Grading - 2024

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	0.0393	2.0706	0.6085	9.8400e-003	0.3117	0.0204	0.3321	0.0855	0.0195	0.1049		1,072.3677	1,072.3677	0.0450	0.1700	1,124.1430
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	0.0701	0.0440	0.5762	1.7600e-003	0.2236	1.0600e-003	0.2246	0.0593	9.7000e-004	0.0603		177.5330	177.5330	4.4300e-003	4.6000e-003	179.0133
Total	**0.1094**	**2.1146**	**1.1847**	**0.0116**	**0.5353**	**0.0214**	**0.5567**	**0.1448**	**0.0204**	**0.1652**		**1,249.9008**	**1,249.9008**	**0.0494**	**0.1746**	**1,303.1563**

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					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**9.2036**	**1.3354**	**10.5390**	**3.6538**	**1.2286**	**4.8823**	**0.0000**	**6,009.7487**	**6,009.7487**	**1.9437**		**6,058.3405**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

3.4 Grading - 2024

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	0.0393	2.0706	0.6085	9.8400e-003	0.3117	0.0204	0.3321	0.0855	0.0195	0.1049		1,072.3677	1,072.3677	0.0450	0.1700	1,124.1430
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	0.0701	0.0440	0.5762	1.7600e-003	0.2236	1.0600e-003	0.2246	0.0593	9.7000e-004	0.0603		177.5330	177.5330	4.4300e-003	4.6000e-003	179.0133
Total	**0.1094**	**2.1146**	**1.1847**	**0.0116**	**0.5353**	**0.0214**	**0.5567**	**0.1448**	**0.0204**	**0.1652**		**1,249.9008**	**1,249.9008**	**0.0494**	**0.1746**	**1,303.1563**

3.5 Building Construction - 2024

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

3.5 Building Construction - 2024

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	0.0626	2.2051	0.8805	0.0104	0.3780	0.0154	0.3934	0.1088	0.0147	0.1236		1,119.4481	1,119.4481	0.0285	0.1654	1,169.4473
Worker	0.5291	0.3320	4.3503	0.0133	1.6878	7.9700e-003	1.6958	0.4476	7.3400e-003	0.4550		1,340.3742	1,340.3742	0.0334	0.0347	1,351.5504
Total	**0.5918**	**2.5371**	**5.2308**	**0.0237**	**2.0658**	**0.0233**	**2.0892**	**0.5565**	**0.0221**	**0.5785**		**2,459.8223**	**2,459.8223**	**0.0619**	**0.2001**	**2,520.9977**

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

3.5 Building Construction - 2024

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	0.0626	2.2051	0.8805	0.0104	0.3780	0.0154	0.3934	0.1088	0.0147	0.1236		1,119.4481	1,119.4481	0.0285	0.1654	1,169.4473
Worker	0.5291	0.3320	4.3503	0.0133	1.6878	7.9700e-003	1.6958	0.4476	7.3400e-003	0.4550		1,340.3742	1,340.3742	0.0334	0.0347	1,351.5504
Total	**0.5918**	**2.5371**	**5.2308**	**0.0237**	**2.0658**	**0.0233**	**2.0892**	**0.5565**	**0.0221**	**0.5785**		**2,459.8223**	**2,459.8223**	**0.0619**	**0.2001**	**2,520.9977**

3.6 Paving - 2024

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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	2.0567					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.0449**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

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

3.6 Paving - 2024

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	0.0526	0.0330	0.4321	1.3200e-003	0.1677	7.9000e-004	0.1685	0.0445	7.3000e-004	0.0452		133.1498	133.1498	3.3200e-003	3.4500e-003	134.2600
Total	**0.0526**	**0.0330**	**0.4321**	**1.3200e-003**	**0.1677**	**7.9000e-004**	**0.1685**	**0.0445**	**7.3000e-004**	**0.0452**		**133.1498**	**133.1498**	**3.3200e-003**	**3.4500e-003**	**134.2600**

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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	2.0567					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.0449**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

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

3.6 Paving - 2024

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	0.0526	0.0330	0.4321	1.3200e-003	0.1677	7.9000e-004	0.1685	0.0445	7.3000e-004	0.0452		133.1498	133.1498	3.3200e-003	3.4500e-003	134.2600
Total	**0.0526**	**0.0330**	**0.4321**	**1.3200e-003**	**0.1677**	**7.9000e-004**	**0.1685**	**0.0445**	**7.3000e-004**	**0.0452**		**133.1498**	**133.1498**	**3.3200e-003**	**3.4500e-003**	**134.2600**

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	133.6743					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**133.8452**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

3.7 Architectural Coating - 2025

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	0.0980	0.0588	0.8017	2.5400e-003	0.3353	1.5000e-003	0.3368	0.0889	1.3800e-003	0.0903		257.2304	257.2304	5.9900e-003	6.4200e-003	259.2920
Total	**0.0980**	**0.0588**	**0.8017**	**2.5400e-003**	**0.3353**	**1.5000e-003**	**0.3368**	**0.0889**	**1.3800e-003**	**0.0903**		**257.2304**	**257.2304**	**5.9900e-003**	**6.4200e-003**	**259.2920**

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	133.6743					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**133.8452**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

3.7 Architectural Coating - 2025

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	0.0980	0.0588	0.8017	2.5400e-003	0.3353	1.5000e-003	0.3368	0.0889	1.3800e-003	0.0903		257.2304	257.2304	5.9900e-003	6.4200e-003	259.2920
Total	**0.0980**	**0.0588**	**0.8017**	**2.5400e-003**	**0.3353**	**1.5000e-003**	**0.3368**	**0.0889**	**1.3800e-003**	**0.0903**		**257.2304**	**257.2304**	**5.9900e-003**	**6.4200e-003**	**259.2920**

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

3.8 Trenching - 2024

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Total					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**			**0.0000**			**0.0000**

3.8 Trenching - 2024

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
Vendor					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Worker					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Total					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**			**0.0000**			**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3825	2.1278	13.7484	0.0323	3.6135	0.0261	3.6396	0.9637	0.0244	0.9881		3,296.7542	3,296.7542	0.1866	0.1657	3,350.7961
Unmitigated	1.3825	2.1278	13.7484	0.0323	3.6135	0.0261	3.6396	0.9637	0.0244	0.9881		3,296.7542	3,296.7542	0.1866	0.1657	3,350.7961

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	424.99	424.99	424.99	1,369,073	1,369,073
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	79.88	79.88	79.88	342,322	342,322
Total	504.86	504.86	504.86	1,711,394	1,711,394

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
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
General Office Building	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606
Parking Lot	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606

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

Unrefrigerated Warehouse-No Rail	0.543085	0.056300	0.173085	0.134258	0.025645	0.007009	0.011926	0.017481	0.000552	0.000248	0.024848	0.000956	0.004606

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0216	0.1967	0.1653	1.1800e-003		0.0150	0.0150		0.0150	0.0150		236.0725	236.0725	4.5200e-003	4.3300e-003	237.4754
NaturalGas Unmitigated	0.0216	0.1967	0.1653	1.1800e-003		0.0150	0.0150		0.0150	0.0150		236.0725	236.0725	4.5200e-003	4.3300e-003	237.4754

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

5.2 Energy by Land Use - NaturalGas

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					
General Office Building	51.6849	5.6000e-004	5.0700e-003	4.2600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.0806	6.0806	1.2000e-004	1.1000e-004	6.1167
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	1954.93	0.0211	0.1917	0.1610	1.1500e-003		0.0146	0.0146		0.0146	0.0146		229.9919	229.9919	4.4100e-003	4.2200e-003	231.3587
Total		**0.0216**	**0.1967**	**0.1653**	**1.1800e-003**		**0.0150**	**0.0150**		**0.0150**	**0.0150**		**236.0725**	**236.0725**	**4.5300e-003**	**4.3300e-003**	**237.4754**

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					
General Office Building	0.0516849	5.6000e-004	5.0700e-003	4.2600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.0806	6.0806	1.2000e-004	1.1000e-004	6.1167
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	1.95493	0.0211	0.1917	0.1610	1.1500e-003		0.0146	0.0146		0.0146	0.0146		229.9919	229.9919	4.4100e-003	4.2200e-003	231.3587
Total		**0.0216**	**0.1967**	**0.1653**	**1.1800e-003**		**0.0150**	**0.0150**		**0.0150**	**0.0150**		**236.0725**	**236.0725**	**4.5300e-003**	**4.3300e-003**	**237.4754**

6.0 Area Detail

6.1 Mitigation Measures Area

Fontana Citrus Industrial Building Project: Maximum Daily AQ and Annual GHG (All Electric) - San Bernardino-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.0579	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097
Unmitigated	8.0579	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097

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	0.9156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.1379					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4100e-003	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097
Total	**8.0579**	**4.3000e-004**	**0.0479**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**0.1030**	**0.1030**	**2.7000e-004**		**0.1097**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9156					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.1379					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4100e-003	4.3000e-004	0.0479	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1030	0.1030	2.7000e-004		0.1097
Total	**8.0579**	**4.3000e-004**	**0.0479**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**0.1030**	**0.1030**	**2.7000e-004**		**0.1097**

7.0 Water Detail

7.1 Mitigation Measures Water

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

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

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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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2656 29th Street, Suite 201
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Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

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

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

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

Professional Experience

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

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

Professional History:

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

Publications:

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

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

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

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

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

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

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

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

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

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

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

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

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

COMMENT - 2

CENTER FOR COMMUNITY ACTION AND ENVIRONMENTAL JUSTICE
"Bringing People Together to Improve Our Social and Natural Environment"

March 18, 2024

City of Fontana, Planning Department
Attn: Irene Romero, Associate Planner
8353 Sierra Avenue
Fontana, CA 92335
Submitted via email to iromero@fontanaca.gov.

Re: Citrus Avenue Industrial Warehouse (SCH #2024020971)

Dear Irene Romero,

This letter is being submitted on behalf of the Center for Community Action and Environmental Justice in response to the Mitigated Negative Declaration for the proposed Citrus Avenue Industrial Warehouse ("Project") which has been proposed for construction. After reviewing the documents, there are a number of concerns which pop out based on the Project.

The first and biggest concern is the proximity of the Project to the nearby Jurupa Hills High School. While it might be tempting to say this should be a nonissue given that other warehouses already exist or have been proposed which are closer to that facility, the fact remains that this will increase the burden on those sensitive receptors—bad prior decisions should not be used as an excuse to perpetuate known issues.

Another concern is for the site access proposed for the Project. Based on the Traffic section and appendices, it is stated that the truck entrances will only have room for one truck at a time, but that it is expected that there would not be many truck trips so the likelihood of queueing in the street is low. This seems to be exceedingly wishful thinking, especially considering the fact that it will have a total of 50 docks. While the traffic appendix attempts to remedy the issue by stating that the gate can just be left open during opening hours to avoid that additional potential impediment, the Project is also stated to be speculative with the potential for 24/7 operations which would imply that the gate would have to be open all the time. Absent that, there is a very real possibility for the Project to result in the same sort of condition that is often seen at other warehouses all around the city where trucks are queued up to enter the facility in the public street, sometimes for extended periods of time. This would put lines of stopped trucks in traffic on Slover Avenue which is often moving at even faster than the signed speed limit of 45 MPH, creating a real safety hazard by design and presenting a deficient condition which would lead to severe crashes. This should not be allowed to happen and instead, the Project needs to be redesigned to put the truck entrances on the north side of the property to avoid that impact onto Slover Avenue.

Mailing Address
PO Box 33124
Jurupa Valley, CA 92519
www.ccaej.org

Finally, as noted above, the speed limit on Slover Avenue is at least 45 MPH. Though the MND states that there are no plans for bike paths in the vicinity of the Project, it does also note that Class II bike lanes are planned, as does the City's Active Transportation Plan. However, the speed limit and traffic volumes of Slover Avenue make that an unacceptable bikeway option based on Caltrans guidance (Figure 1) so it is imperative that this opportunity to make sure the right infrastructure is provided at the right time not be overlooked. Similar to putting lines of stopped trucks on Slover Avenue, failure to do so would also result in the creation of a deficient condition for bicyclists and should be preemptively avoided by building either a Class I or Class IV facility instead.

Thank you for taking the time to consider these concerns. If there are any questions, please do not hesitate to reach out for answers of clarification.

Sincerely,

Marven Norman, Policy Coordinator

CC: Inland Empire Biking Alliance

CCAEJ is a long-standing community based organization with over 40 years of experience advocating for stronger regulations through strategic campaigns and building a base of community power. Most notably, CCAEJ's founder Penny Newman won a landmark federal case against Stringfellow Construction which resulted in the 'Stringfellow Acid Pits' being declared one of the first Superfund sites in the nation. ***CCAEJ*** prioritizes community voices as we continue our grassroots efforts to bring lasting environmental justice to the Inland Valley Region.

Mailing Address
PO Box 33124
Jurupa Valley, CA 92519
www.ccaej.org

Attachment A

Caltrans Contextual Guidance for Preferred Bicycle Facilities**

Place Type and Surrounding Land-Use [1]	Design Year ADT	Posted Speed 15-20	25-30	35-45	> 45
Urban Areas & Suburban Main Streets	<2,500	Standard Shoulder or Shared Lane	Standard Shoulder or Shared Lane	Class II or Class IV	Class IV
	2,500-5,000				
	5,000-10,000	Class II or Class IV	Class II or Class IV	Class IV	
	>10,000	Class IV	Class IV		
Rural Areas (Developing Corridors)		15-20	25-30	35-45	> 45
	<2,500	Standard Shoulder (may be designated as a Class III facility)[2]			
	2,500-5,000				
	5,000-10,000				
	>10,000				
		15-20	25-30	35-45	> 45
Rural Main Streets	<2,500	Standard Shoulder or Shared Lane	Class II	Class II	Class I or IV
	2,500-5,000				
	5,000-10,000	Class II			
	>10,000			Class I, II, or IV	

1 Highway Design Manual (HDM) Index 81.3

2 HDM, Tables 302.1 and 307.2

** Chart is not a replacement for engineering judgement. Intended for planning purposes, to identify minimum preferred bikeway facility under different place type, volume and speed conditions.

Figure 1: Caltrans Contextual Guidance for Preferred Bicycle Facilities.[1]

[1] https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/office-of-smart-mobility-and-climate-change/planning-contextual-guidance-memo-03-11-20-a11y.pdf.

COMMENT - 3

Irene Romero

From: Debbie Ashley Hemphill <debbie.ashleyc21king@gmail.com>
Sent: Monday, March 18, 2024 3:55 PM
To: Irene Romero
Subject: Re: MCN22-115 - Slover and Boyle Project - Project Notice

Subject: Concerns Regarding Project Proposal for Master Case No. 22-115

Dear Irene,

I hope this email finds you well. I am writing to express my concerns regarding the project proposal for Master Case No. 22-115, specifically General Plan Amendment (GPA) No. 22-009, Zone District Map Amendment (ZCA) No. 22-009, Tentative Parcel Map No. 20834 (TPM No. 22-029), Design Review (DRP) No. 22-054, and Development Agreement (AGR) No. 23-096.

As the residents of the community of Oleander, I believe that the inclusion of the Oleander properties is crucial for the successful development of this project. The proposed General Plan Amendment to change the land use designation from Community Commercial (C-C) to Light Industrial (I-L) and the Zoning District Map Amendment from Community Commercial (C-1) to Light Industrial (M-1) for APN: 0251-151-10 raise concerns about the potential impact on the surrounding area.

The consolidation of twenty-one parcels into one for the construction of a 355,995 square-foot industrial commerce building, along with associated site improvements, may have significant implications for the community in terms of traffic congestion, environmental impact, and overall livability. Leaving out 75,040 square-foot. As in the photo I attached.

I urge the City Council to carefully consider the implications of this project on the Oleander properties and the community as a whole before making a decision. It is essential to prioritize sustainable development that takes into account the needs and concerns of all stakeholders involved. It's sad to see the resident's stuck in the industrial zone. Please help them. It's not fair they do not want to do improvements on Oleander to save their budget.

I appreciate your attention to this matter and look forward to hearing your thoughts on how we can ensure responsible and inclusive development in our city.

Thank you for your time and consideration.

Sincerely,
Debbie Hemphill

On Tue, Feb 27, 2024 at 5:02 PM Irene Romero <iromero@fontanaca.gov> wrote:

> Hello,
>
> Please use the following link to view the project notice for MCN22-115:

https://www.fontanaca.gov/DocumentCenter/View/43861/MCN-22-115-GPA-22-009?bidId=

Please let me know if you have any questions.

Thank you,

Irene Romero
Associate Planner • Planning
City of Fontana • 8353 Sierra Ave • Fontana, CA 92335
iromero@fontanaca.gov • Office: (909) 350-6658

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Debbie Ashley Hemphill REALTOR®

- DRE: 01998466
- C: (909) 204-1038
- E: Debbie.Ashleyc21king@gmail.com
- If immediate assistance please email or call my personal assistant:
- C; (909) 436-7498
- E: Debbiesassistant16@gmail.com

CENTURY 21 KING

- 8338 DAY CREEK BLVD STE 101
- RANCHO CUCAMONGA, CA 91739

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-

COMMENT - 4

Irene Romero

From: Philip Viramontes <viramontesphilip@yahoo.com>
Sent: Sunday, March 3, 2024 12:39 PM
To: Irene Romero; Irene Romero
Subject: Fw: Notice of Filing DRP22-000049 and TPM22-000022

Hello

I would like to attach my previous comments concerning the CHIPT Fontana Citrus Avenue application to be on the record for the hearing that's set to take place for Master Case No. 22-115: General Plan Amendment No. 22-009, Zone District Map Amendment No. 22-009 Tentative Parcel Mao No. 20834 (TPM No. 22-029), Design Review No. 22-054 and Development Agreement (AGR) No. 23-096. Thank you.

Philip Viramontes
909-578-1089

----- Forwarded Message -----
From: Philip Viramontes <viramontesphilip@yahoo.com>
To: iromero@fontana.org <iromero@fontana.org>
Sent: Thursday, September 1, 2022 at 09:05:32 AM PDT
Subject: Notice of Filing DRP22-000049 and TPM22-000022

Hello

I would like to just go on the record by saying. My name is Philip Viramontes and I am the property owner at 10446 Oleander Ave in the city of Fontana. The reason for this email is to express some concerns and questions about the Notice of Filing DRP22-000049 and TPM22-000022. I am not in support of this warehouse development at this time. I've seen from the map presented to me by real estate agent Luis Ramos from Colliers representing Crow Holdings that their intention is to leave all the homes on Oleander's west side between Boyle and Slover the way they are. His exact words to me were, "they dont want it, it's all just street dedication for the developer". I became aware of the developer's intentions when with an offer was presented to sell 16228 Slover Avenue another property that we own within this Notice of Filing. I am not against the warehouse development, but I am against having warehouses being put up north, east, south, and west of me without an option to sell and relocate. Thats the situation we are in on Oleander. To my understanding some of my neighbors are potential sellers and I think moving forward and approving this Notice of Filing is not the right thing to do at this time. My family and I have lived in this neighborhood since the 80's and we understand the future plans for this area is warehouse development, however I think it should be done the right way. Not pick and choose what properties you want out of convenience. I've sold properties in this area in the past 10447 Oleander Fontana to Duke Realty and 16550 and 16547 Boyle Ave Fontana to Panattoni Development because they wanted to square off the whole block to make it look the way it should without homes stuck in the middle of these warehouses. It should be warehousing or homes, not both. As of now we still own 10446 Oleander Avenue Fontana, 16228 Slover Avenue Fontana, 16252 Boyle Avenue Fontana, 16236 Boyle Avenue Fontana, 16204 Boyle Avenue Fontana, and 16190 Boyle Avenue Fontana California 92337. Roughly over 6 acres. If the city chooses to approve this development, I don't see the reason in selling anymore property.

What options are we going to have should the city decide to move forward with this plan. What are we able to do with the properties being zoned M1 and M2 or at that point are they just homes stuck in the middle of warehouses? Also, are the plans being looked at from an environmental standpoint? How will traffic and noise affect us? Lastly, what is the appeals process? Thank you for your time.

Philip Viramontes
16190 Boyle Ave
Fontana, Ca. 92337
9095781089