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MEMORANDUM

DATE: January 6, 2023

TO: Gregg Lord, Lord Constructors, Inc.

FROM: Amy Fischer, Executive Vice President
Cara Carlucci, Associate

SUBJECT: Air Quality, Greenhouse Gas, and Energy Technical Memorandum for the Stewart Almond Warehouse Project located in the County of San Bernardino, California

INTRODUCTION

LSA has prepared this Air Quality, Energy, and Greenhouse Gas Technical Memorandum to evaluate the impacts associated with construction and operation of the proposed Stewart Almond Warehouse Project (project) in the County of San Bernardino (County), California. This analysis was prepared using methods and assumptions recommended in the air quality impact assessment guidelines of the South Coast Air Quality Management District (SCAQMD) in its *CEQA Air Quality Handbook* (1993) and associated updates. In keeping with these guidelines, this analysis describes existing air quality, air quality and GHG emissions generated from project-related sources, regional air pollution, and global climate change. In addition, this analysis discusses energy use resulting from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

PROJECT LOCATION AND DESCRIPTION

The 2-acre project site is located at 8531 Almond Avenue in San Bernardino County, California (Assessor's Parcel Number [APN] 230-131-010). The project site is currently developed with a 1,500-square-foot (sq ft) residential structure and has a land use designation of Medium Density Residential (MDR). The proposed project is seeking a General Plan Amendment that would change the current land use designation from MDR to community Industrial (IC). See Figure 1, Project Location and Vicinity and Figure 2, Project Site Plan (included as Attachment A).

The project proposes to demolish the existing 1,500 sq ft residential structure and concrete driveway to develop a 41,000 sq ft two-story warehouse building. The first floor would be comprised of 2,000 sq ft of office space, 18,500 sq ft of open assembly area, and 18,500 sq ft of warehouse space. The second floor would consist of 2,000 sq ft of office space located directly above the first-floor office. The proposed project would include a surface parking lot with a total of 53 parking stalls, including three Americans with Disabilities (ADA) compliant stalls and three electric vehicle (EV) stalls. In addition, approximately 15,000 sq ft of drought-tolerant landscaping would be installed in the project area. In addition, the proposed project would implement the following sustainability features: solar ready roof; tinted windows for energy efficient heating, ventilation, and

air conditioning (HVAC) equipment; motion sensors on all lighting with automatic shut off skylights throughout the assembly/warehouse uses; blue box controls per California Green Building Standards Code (CALGreen Code) requirements; low-flow toilets and sinks; and drought-tolerant landscape. The proposed project would generate approximately 70 average daily trips, including 48 passenger vehicle trips, 5 two-axle truck trips, 4 three-axle truck trips, and 13 four-axle truck trips.

Construction would begin on May 1, 2023, and would end on October 15, 2023. Construction would include demolition, site preparation, grading, building construction, paving, and architectural activities. Construction activities would involve the use of standard earthmoving equipment such as scrapers, graders, water trucks, dozers, cranes, boom trucks, forklifts, rubber-tired loaders, rubber-tired backhoes, and other small- to medium-sized construction equipment, as needed. This analysis also assumes the use of Tier 2 construction equipment. The project site would be assumed to be balanced, and no import or export of soil is required. In addition, as identified above, the proposed project would include the demolition of the existing on-site residential structure.

EXISTING LAND USES IN THE PROJECT AREA

For the purposes of this analysis, sensitive receptors are areas of population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include residences, schools, daycare centers, hospitals, parks, and similar uses which are sensitive to air quality. Impacts on sensitive receptors are of particular concern because they are the population most vulnerable to the effects of air pollution. The project site is surrounded by residential uses to the north, a vacant lot to the east, industrial uses to the south, and residential uses to the west. The closest sensitive receptors to the project site are residential uses such as single-family homes located approximately 100 feet (30 meters) west from the project site boundary across Almond Avenue.

ENVIRONMENTAL SETTING

Air Quality Background

Air quality is primarily a function of local climate, local sources of air pollution, and regional pollution transport. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain, and, for photochemical pollutants, sunshine.

A region's topographic features have a direct correlation with air pollution flow and therefore are used to determine the boundary of air basins. The proposed project is in San Bernardino County and within the jurisdiction of the SCAQMD, which regulates air quality in the South Coast Air Basin (Basin).

The Basin comprises approximately 10,000 square miles (sq mi) and covers all of Orange County and the urban parts of Los Angeles, Riverside, and San Bernardino Counties. The Basin is on a coastal plain with connecting broad valleys and low hills to the east. Regionally, the Basin is bounded by the Pacific Ocean to the southwest and high mountains to the east, forming the inland perimeter.

Both the State and federal governments have established health-based ambient air quality standards for six criteria air pollutants: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead, and suspended particulate matter. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Two criteria pollutants, O_3 and NO_2, are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as CO, SO_2, and lead are considered local pollutants that tend to accumulate in the air locally.

Air quality monitoring stations are located throughout the nation and are maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the United State Environmental Protection Agency (USEPA) to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable National Ambient Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the USEPA. In addition, different classifications of attainment (e.g., marginal, moderate, serious, severe, and extreme) are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and to comply with the NAAQS. As shown in Table A, the Basin is designated as nonattainment for the federal standards for O_3 and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and nonattainment for the State standards for O_3, particulate matter less than 10 microns in diameter (PM_{10}), and $PM_{2.5}$.

Table A: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Nonattainment	N/A
O_3 8-hour	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Unclassified/Attainment (1-hour) Attainment/Maintenance (Annual)
SO_2	Attainment	Unclassified/Attainment
Lead	Attainment[1]	Unclassified/Attainment[1]
All Others	Attainment/Unclassified	Attainment/Unclassified

Source 1: NAAQS and CAAQS Attainment Status for South Coast Air Basin (SCAQMD 2016). Website: www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf (accessed November 2022).
Source 2: Nonattainment Areas for Criteria Pollutants (Green Book) (USEPA 2019). Website: https://www.epa.gov/green-book (accessed November 2022).

[1] Only the Los Angeles County portion of the South Coast Air Basin is in nonattainment for lead.

CAAQS = California ambient air quality standards
CO = carbon monoxide
N/A = not applicable
NAAQS = national ambient air quality standards
NO_2 = nitrogen dioxide
O_3 = ozone
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SCAQMD = South Coast Air Quality Management District
SO_2 = sulfur dioxide
USEPA = United States Environmental Protection Agency

O_3 levels, as measured by peak concentrations and the number of days over the State 1-hour standard, have declined substantially as a result of aggressive programs by SCAQMD and other regional, State, and federal agencies. The reduction of peak concentrations represents progress in

improving public health; however, the Basin still exceeds the State standard for 1-hour and 8-hour O_3 levels. The USEPA lowered the 1997 0.80 parts per million (ppm) national 8-hour O_3 standard to 0.75 ppm in 2008 and then to 0.70 ppm on October 1, 2015. The Basin is classified nonattainment for the 1-hour and 8-hour O_3 standards at the State and federal levels. During 2019 to 2021, the Fontana Monitoring Station located at 14360 Arrow Boulevard (the closest monitoring station to the project site) recorded the following exceedances of the State and federal 1-hour and 8-hour O_3 standards.[1]

- The federal 8-hour O_3 standard had 67 exceedances in 2019, 89 exceedances in 2020, and 81 exceedances in 2021.
- The State 8-hour O_3 standard had 71 exceedances in 2019, 91 exceedances in 2020, and 83 exceedances in 2021.
- The State 1-hour O_3 standard had 41 exceedances in 2019, 56 exceedances in 2020, and 44 exceedances in 2021.
- The federal 1-hour O standards had 0 exceedances in 2019, 8 exceedances in 2020, and 1 exceedance in 2021.

National and State standards have also been established for $PM_{2.5}$ over 24-hour and yearly averaging periods. $PM_{2.5}$, because of the small size of individual particles, can be especially harmful to human health. $PM_{2.5}$ is emitted by common combustion sources such as cars, trucks, buses, and power plants, in addition to ground-disturbing activities. On December 17, 2006, the USEPA strengthened the 24-hour $PM_{2.5}$ NAAQS from 65 micrograms per cubic meter ($\mu g/m^3$) to 35 $\mu g/m^3$, and the Basin was subsequently designated "moderate" nonattainment for the 2006 24-hour $PM_{2.5}$ NAAQS on December 14, 2009. The Basin is also considered a nonattainment area for the $PM_{2.5}$ standard at the State level. The Fontana Monitoring Station recorded the following exceedances of the federal 24-hour $PM_{2.5}$ standard. No exceedances were recorded in the three-year period for the State 24-hour $PM_{2.5}$ standard.

- The federal 24-hour $PM_{2.5}$ standard had 3 exceedances in 2019, 4 exceedances in 2020, and 2 exceedances in 2021.

The Basin is classified as a PM_{10} nonattainment area at the State level and was redesignated from serious nonattainment to attainment of the federal PM_{10} standard on July 26, 2013. Because the Basin was redesignated from nonattainment to attainment, a PM_{10} maintenance plan was adopted in 2013 and is required to be updated every 10 years. The Fontana Monitoring Station recorded the following exceedances for the State 24-hour PM_{10} standard. No exceedances were recorded in the three-year period for the federal 24-hour PM_{10} standard.

- The State 24-hour PM_{10} standard had 11 exceedances in 2019, 6 exceedances in 2021, and 3 exceedances in 2021.

[1] California Air Resources Board (CARB). 2020. iADAM Air Quality Data Statistics. Website: https://www.arb.ca.gov/adam/topfour/topfour1.php (accessed November 2022).

All areas of the Basin have continued to remain below the federal CO standards (35 ppm 1-hour and 9 ppm 8-hour) since 2003. The USEPA redesignated the Basin to attainment of the federal CO standards effective June 11, 2017. The Basin is also well below the State CO standards (20 ppm 1-hour CO and 9 ppm 8-hour CO).

Energy Background

Electricity

Electricity is a manmade resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, and refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).

According to the most recent data available, in 2020, California's electricity was generated primarily by natural gas (37.06 percent), renewable sources (33.09 percent), large hydroelectric (12.21 percent), nuclear (9.33 percent), and coal (2.74 percent). Total electric generation in California in 2020 was 272,576 gigawatt hours (GWh), down 2 percent from the 2019 total generation of 277,704 GWh.[2]

The project site is within the service territory of Southern California Edison (SCE). SCE provides electricity to more than 15 million people in a 50,000 sq mi area of Central, Coastal, and Southern California.[3] According to the California Energy Commission (CEC), total electricity consumption in the SCE service area in 2020 was 83,633 GWh (32,475 GWh for the residential sector and 51,158 GWh for the non-residential sector). Total electricity consumption in San Bernardino County in 2020 was 15,968.5 GWh (15,968,515,536 kilowatt-hours (kWh).[4]

Natural Gas

Natural gas is a non-renewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over millions of years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills).

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2 California Energy Commission (CEC). 2021a. *2020 Total System Electric Generation*. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation (accessed November 2022).

3 Southern California Edison (SCE). 2021. About Us. Website: https://www.sce.com/about-us/who-we-are (accessed November 2022).

4 CEC. 2020b. Electricity Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/elecbycounty.aspx and http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed November 2022).

Natural gas consumed in California is used for electricity generation (45 percent), residential uses (21 percent), industrial uses (25 percent), and commercial uses (9 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[5]

The Southern California Gas Company (SoCalGas) is the natural gas service provider for the project site. SoCalGas provides natural gas to approximately 21.8 million people in a 24,000 sq mi service area throughout Central and Southern California, from Visalia to the Mexican border.[6] According to the CEC, total natural gas consumption in the SoCalGas service area in 2020 was 5,231 million therms (2,426 million therms for the residential sector and 2,294 million therms for the non-residential sector). Total natural gas consumption in San Bernardino County in 2020 was 527 million therms (527,236,428 therms).[7]

Fuel

Petroleum is also a non-renewable fossil fuel. Petroleum is a thick, flammable, yellow-to-black mixture of gaseous, liquid, and solid hydrocarbons that occurs naturally beneath the earth's surface. Petroleum is primarily recovered by oil drilling. It is refined into a large number of consumer products, primarily fuel oil, gasoline, and diesel.

The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.9 mpg in 2020.[8] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. The Act, which originally mandated a national fuel economy standard of 35 mpg by year 2020[9], applies to cars and light trucks of model years 2011 through 2020. In March 2020, the United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFÉ) standards for Model Years 2024–2026 Passenger Cars and Light Trucks, further detailed below.

Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. According to the most recent data available, total gasoline consumption in California was 360,237 thousand barrels or 1,819.9 trillion British Thermal Units (BTU) in 2019.[10] Of the total gasoline consumption, 343,677 thousand

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5 CEC. 2021c. Supply and Demand of Natural Gas in California. Website: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california (accessed November 2022).

6 Southern California Gas Company (SoCalGas). 2021. About SoCalGas. Website: https://www.socalgas.com/about-us/company-profile (accessed November 2022).

7 CEC. 2020c. Gas Consumption by County and Entity. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx and http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed November 2022).

8 U.S. Department of Transportation (USDOT). "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: https://www.bts.dot.gov/bts/bts/content/average-fuel-efficiency-us-light-duty-vehicles (accessed November 2022).

9 U.S. Department of Energy. 2007. "Energy Independence & Security Act of 2007." Website: https://www.afdc.energy.gov/laws/eisa (accessed November 2022).

10 A British Thermal Unit is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

barrels or 1,736.3 trillion BTU were consumed for transportation.[11] Based on fuel consumption obtained from CARB's California Emissions Factor Model, Version 2021 (EMFAC2021), approximately 321.6 million gallons of diesel and approximately 915.5 million gallons of gasoline will be consumed from vehicle trips in San Bernardino County in 2022

Greenhouse Gas

GHGs are present in the atmosphere naturally, are released by natural sources, or form from secondary reactions taking place in the atmosphere. Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. Although manmade GHGs include naturally occurring GHGs such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), some gases like hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and sulfur hexafluoride (SF_6) are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

REGULATORY SETTING

This section provides regulatory background information for air quality, energy, and greenhouse gases.

Air Quality Regulations

Federal Regulations

The 1970 Federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and set deadlines for their attainment. The CAA Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required for areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the

[11] U.S. Department of Energy, Energy Information Administration (EIA). 2021a. California State Profile and Energy Estimates. Table F3: Motor gasoline consumption, price, and expenditure estimates, 2019. Website: eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed November 2022).

national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

State Regulations

In 1988, the California Clean Air Act (CCAA) required that all air districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards (CAAQS) for CO, O_3, SO_2, and NO_2 by the earliest practical date. The CCAA provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive three-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

The California Air Resources Board (CARB) is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Regional Regulations

The proposed project would be required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures, so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. SCAQMD Rule 1113 limits the volatile organic compound (VOC) content of architectural coatings. Applicable dust suppression techniques from SCAQMD Rule 403 and low-VOC content in paints under SCAQMD Rule 1113 are summarized below. Implementation of these dust suppression techniques can reduce fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

South Coast Air Quality Management District Rule 403 Measures.

- Water active sites at least twice daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code Section 23114 (freeboard means vertical space between the top of the load and the top of the trailer).
- Traffic speeds on all unpaved roads shall be reduced to 15 miles per hour or less.

South Coast Air Quality Management District Rule 1113 Measures. SCAQMD Rule 1113 governs the sale, use, and manufacture of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction and operation of the proposed project. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

Local Regulations

San Bernardino County General Plan. The county of San Bernardino addresses air quality in the Natural Resources Element of its General Plan[12]. The Natural Resources Element contains goals and policies that work to promote health and wellness of residents in San Bernardino County through improvements in locally generated emissions. The following policies are applicable to the proposed project:

- **Policy NR-1.2 Indoor air quality**. We promote the improvement of indoor air quality through the California Building and Energy Codes and through the provision of public health programs and services.

- **Policy NR-1.3 Coordination on air pollution**. We collaborate with air quality management districts and other local agencies to monitor and reduce major pollutants affecting the county at the emission source.

- **Policy NR-1.6 Fugitive dust emissions.** We coordinate with air quality management on requirement for dust control plans, revegetation, and soil compaction to prevent fugitive dust emissions.

- **Policy NR-1.7 Greenhouse gas reduction targets.** We strive to meet the 2040 and 2050 greenhouse gas emission reduction targets in accordance with state law.

- **Policy NR-1.8 Construction and operations.** We invest in county facilities and fleet vehicles to improve energy efficiency and reduce emissions. We encourage county contractors and other builders and developers to use low-emission construction vehicles and equipment to improve air quality and reduce emissions.

- **Policy NR-1.9 Building design and upgrades**. We use the CALGreen Code to meet energy efficiency standards for new buildings and encourage the upgrading of existing buildings to incorporate design elements, building materials, and fixtures that improve environmental sustainability and reduce emissions

Energy Regulations

Federal Regulations

Energy Policy Act of 2005. The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under this Act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available

[12] County of, San Bernardino. 2020. County of San Bernardino General Plan, *Natural Resources Element.* October 27. Website: Natural Resources – San Bernardino County (countywideplan.com) (accessed November 2022)

for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

Corporate Average Fuel Economy (CAFE). On March 31, 2022, the National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gas between model years 2030 to 2050.

State Regulations

Assembly Bill 1575, Warren-Alquist Act. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted Assembly Bill (AB) 1575 (also known as the Warren-Alquist Act), which created the CEC. The statutory mission of the CEC is to forecast future energy needs; license power plants of 50 megawatts (MW) or larger; develop energy technologies and renewable energy resources; plan for and direct State responses to energy emergencies; and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code (PRC) Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require Environmental Impact Reports (EIRs) to include, where relevant, mitigation measures proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal, including (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and (3) increasing reliance on renewable energy sources.

Senate Bill 1389, Energy: Planning and Forecasting. In 2002, the State Legislature passed Senate Bill (SB) 1389, which required the CEC to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles (ZEVs) and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every two years and an update every other year. CEC approved the 2020 Integrated Energy Policy Report in March 2021.[13] The 2020 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate

[13] CEC. 2020. 2020 Integrated Energy Policy Report. Docket No. 20-IEPR-01.

adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast.

Renewable Portfolio Standard. SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015, SB 350 established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all the State's electricity come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019.[14]

Title 24, California Building Code and CalGreen Code. Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR), known as the California Building Code (CBC). The CEC first adopted the Building Energy Efficiency Standards for Residential and Non-residential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the State. The CBC is updated every three years, the 2022 CBC was published in July 2022 and will be effective as of January 1, 2023. The efficiency standards apply to both new construction and rehabilitation of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in CCR Title 24.In 2010, the California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code took effect on January 1, 2011. The CALGreen Code is updated on a regular basis, with the most recent update consisting of the 2022 CALGreen Code standards that will be effective January 1, 2023. The CALGreen Code established mandatory measures for residential and non-residential building construction and encouraged sustainable construction practices in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the State's efforts to reduce greenhouse gas (GHG) emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and non-residential buildings subject to the standard.

California Energy Efficiency Strategic Plan. On September 18, 2008, the California Public Utilities Commission (CPUC) adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals

[14] California Public Utilities Commission (CPUC). 2019. Renewables Portfolio Standard Program. Website: cpuc.ca.gov/rps (accessed November 2022).

known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- 50 percent of commercial buildings will be retrofitted to ZNE by 2030.
- 50 percent of new major renovations of State buildings will be ZNE by 2025.

Regional Regulations

There are no regional regulations that apply to the proposed project.

Local Regulations

San Bernardino County General Plan. The county of San Bernardino addresses energy in the Renewable Energy and Conservation Element of its General Plan.[15] The Renewable Energy and Conservation Element contains goals and policies that work to ensure efficient consumption of energy and water, reduce greenhouse gas emissions, pursue the benefits of renewable energy and responsibly manage its impacts on our environment, communities, and economy. The following policies are applicable to the proposed project:

- **Policy RE-1.2:** Optimize energy efficiency in the built environment.
    - **RE 1.2.5:** Collaborate with community partners to promote the benefits of energy efficiency to County residents, businesses, and industries.
    - **RE 1.2.6:** Encourage new development to comply with the optional energy efficiency measures of the CALGreen Code.
    - **RE 1.2.7:** Encourage passive solar design in subdivision and design review processes.
- **Policy RE-1.4:** Encourage residents and businesses to conserve energy.
    - **RE 1.4.1:** Collaborate with utilities to support and learn from annual energy benchmarking reports that large energy users are conducting pursuant to AB 1103.
- **Policy RE-2.4:** Identify and prioritize programs that support cost effective and universal access to renewable energy
    - **RE 2.4.2:** Educate developers about the County's RE goals and policies, and encourage the inclusion of renewable energy facilities for onsite use in new developments.

[15] County of, San Bernardino. 2020. County of San Bernardino General Plan, *Renewable Energy and Conservation Element.* October 27. Website: Renewable Energy & Conservation – San Bernardino County (countywideplan.com) (accessed November 2022)

- **Policy RE-2.5:** Support renewable energy systems that accelerate zero net energy (ZNE) through innovative design, construction, and operations of residences, businesses, and institutions that are grid-neutral and independent of centralized energy infrastructure

    - **RE 2.5.1:** Allow and encourage construction of new buildings designed to ZNE standards consistent with state programs.

- **Policy RE-2.6:** Encourage energy efficiency through appropriate renewable energy systems.

    - **RE 2.6.3:** Encourage solar energy generation on rooftops and on covered parking as the first priority for on-site energy generation

Global Climate Change Regulations

Federal Regulations

The United States has historically taken a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO_2 emissions under the CAA.

Although there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change, including the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the CAA, finding that seven GHGs (CO_2, CH_4, N_2O, HFCs, NF_3, PFCs, and SF_6) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

State Regulations

CARB is the lead agency for implementing climate change regulations in the State. Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is Assembly Bill (AB) 32, passed by the State legislature on August 31, 2006. This effort set a GHG emission reduction target to reduce GHG emissions to 1990 levels by 2020. CARB has established the level of GHG emissions in 1990 at 427 million metric tons of carbon dioxide equivalent (MMT CO_2e). The emissions target of 427 MMT CO_2e requires the reduction of 169 MMT CO_2e from the State's projected business-as-usual 2020 emissions of 596 MMT CO_2e. AB 32 requires CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. CARB approved the Scoping Plan on December 11, 2008. It contains the main strategies California will implement to achieve the reduction of approximately 169 MMT CO_2e, or approximately 30 percent, from the State's projected 2020 emission level of 596 MMT CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10 percent from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG

inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reduction of 31.7 MMT CO_2e);
- The Low-Carbon Fuel Standard (15.0 MMT CO_2e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO_2e).

The Scoping Plan identifies 18 emissions reduction measures that address cap-and-trade programs, vehicle gas standards, energy efficiency, low carbon fuel standards, renewable energy, regional transportation-related GHG targets, vehicle efficiency measures, goods movement, solar roof programs, industrial emissions, high-speed rail, green building strategies, recycling, sustainable forests, water, and air. The measures would result in a total reduction of 174 MMT CO_2e by 2020.

On August 24, 2011, CARB unanimously approved both the new supplemental assessment and reapproved its Scoping Plan, which provides the overall roadmap and rule measures to carry out AB 32. CARB also approved a more robust California Environmental Quality Act (CEQA) equivalent document supporting the supplemental analysis of the cap-and-trade program. The cap-and-trade program took effect on January 1, 2012, with an enforceable compliance obligation that began January 1, 2013.

CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020 and sets the groundwork to reach long-term goals set forth in Executive Orders (Eos) S-3-05 and B-16-2012. The First Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,[16] to reflect the 2030 target set by EO B-30-15 and codified by Senate Bill (SB) 32.

The 2022 Scoping Plan[17] assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

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16 CARB. 2017. *California's 2017 Climate Change Scoping Plan.* November.

17 CARB. 2022. *2022 Scoping Plan*. November 16. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed January 2023).

Senate Bill 375 (2008). Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, CARB approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). CARB may update the targets every four years and must update them every eight years. MPOs, in turn, must demonstrate how their plans, policies, and transportation investments meet the targets set by CARB through Sustainable Community Strategies (SCSs). The SCSs are included with the Regional Transportation Plan (RTP), a report required by State law. However, if an MPO finds that its SCS will not meet the GHG reduction target, it may prepare an Alternative Planning Strategy. The Alternative Planning Strategy identifies the impediments to achieving the targets.

Executive Order B-30-15 (2015). Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and, therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act. SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increase energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the California Public Utilities Commission (CPUC) for the private utilities and by the California Energy Commission (CEC) for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other nonrenewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In summer 2016, the Legislature passed, and the Governor signed, SB 32 and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving its 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change analysis of the emission trajectory that would stabilize

atmospheric GHG concentrations at 450 parts per million (ppm) CO_2e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

Senate Bill 100. On September 10, 2018, Governor Brown signed SB 100, which raises California's renewable portfolio standard requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the Western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18. EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions should be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Title 24, Building Efficiencies Standards, and the California Green Building Standards Code. In November 2008, the California Building Standards Commission established the California Green Building Standards Code (CALGreen Code) (CCR, Title 24, Part 11), which sets performance standards for residential and nonresidential development to reduce environmental impacts and encourage sustainable construction practices. The CALGreen Code addresses energy efficiency, water conservation, materials conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and nonresidential uses. The new measures took effect January 1, 2020. The next set of standards will be adopted in 2022 and apply to projects seeking building permits on or after January 1, 2023.

Regional Regulations

Southern California Association of Governments. The Southern California Association of Governments (SCAG) is a regional council consisting of the following six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. In total, the SCAG region encompasses 191 cities and over 38,000 sq mi within Southern California. SCAG is the MPO serving the region under federal law and serves as the Joint Powers Authority, the Regional Transportation Planning Agency, and the Council of Governments under State law. As the Regional Transportation Planning Agency, SCAG prepares long-range transportation plans for the Southern California region, including the RTP/SCS and the 2008 regional comprehensive Plan (RCP).

On September 3, 2020, SCAG adopted Connect SoCal–The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS).[18] In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, CARB has set GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035. The RTP/SCS lays out a strategy for the region to meet these targets. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high-quality transit areas and livable corridors, and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles.[19] However, the SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.

South Coast Air Quality Management District. In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the Basin. The Working Group developed several different options that are contained in the SCAQMD 2008 draft guidance document titled *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* that could be applied by lead agencies. On September 28, 2010, SCAQMD Working Group Meeting No. 15 provided further guidance, including a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. SCAQMD has not presented a finalized version of these thresholds to the governing board.

SCAQMD identifies the emissions level for which a project would not be expected to substantially conflict with any State legislation adopted to reduce statewide GHG emissions. As such, the utilization of a service population represents the rates of emissions needed to achieve a fair share of the State's mandated emissions reductions. Overall, SCAQMD identifies a GHG efficiency level that, when applied statewide or to a defined geographic area, would meet the 2020 and post-2020 emission targets as required by AB 32 and SB 32. If projects are able to achieve targeted rates of emissions per the service population, the State would be able to accommodate expected population growth and achieve economic development objectives while also abiding by AB 32's emissions target and future post-2020 targets.

Local Regulations

County of San Bernardino Regional Greenhouse Gas Reduction Plan. As a response to the 2006 AB 32 law, a project partnership led by the San Bernardino Associated Governments, the predecessor agency to the San Bernardino County Transportation Authority (SBCTA), has compiled an inventory of GHG emissions and developed reduction measures that was adopted by the 21 Partnership Cities of San Bernardino County. The regional GHG reduction plan will serve as the basis for cities in San

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18 Southern California Association of Governments (SCAG). 2020. *Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments.* Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176 (accessed November 2022).

19 Ibid.

Bernardino County to develop more detailed community level climate action plans. The San Bernardino County Regional Greenhouse Gas Reduction Plan, which identifies the County's vision and goals on reducing GHG emissions in the different cities, local government facilities, and communities. In response to these initiatives, an informal project partnership, led by the San Bernardino Council of Governments (SBCOG), compiled a GHG emissions inventory and an evaluation of reduction measures that could be adopted by the 25 Partnership Cities of San Bernardino County. The Partnership has committed to undertake the following actions that will reduce GHG emissions associated with its regional (or countywide) activities:

- Prepare a baseline (2016) GHG emissions inventory for each of the 25 Partnership Jurisdictions in the County.
- Prepare a future year (2020, 2030, and 2045) GHG emissions forecasts for each of the jurisdictions.
- Develop general GHG reduction measures and jurisdiction-specific measures appropriate for each jurisdiction.
- Develop consistent baseline in information for jurisdictions to use for their development of community climate action plans (CAPs) meeting jurisdiction-identified reduction goals.

METHODOLOGY

Construction Emissions

Construction activities can generate a substantial amount of air pollution. Construction activities are considered temporary; however, short-term impacts can contribute to exceedances of air quality standards. Construction activities include demolition, site preparation, earthmoving, and general construction. The emissions generated from these common construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty, diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips.

The California Emissions Estimator Model version 2020.4.0 (CalEEMod) computer program was used to calculate emissions from on-site construction equipment and from worker and vehicle trips to the site. This analysis assumes that construction would begin on May 1, 2023, and would end on October 15, 2023. This analysis also assumes the use of Tier 2 construction equipment as required by current CARB regulations, and that the proposed project would comply with SCAQMD Rule 403 measures. The proposed project would include the demolition of the existing 1,500 sq ft residential structure, which was included in this analysis. Construction activities would involve the use of standard earthmoving equipment such as scrapers, graders, water trucks, dozers, cranes, boom trucks, forklifts, rubber-tired loaders, rubber-tired backhoes, and other small- to medium-sized construction equipment, as needed. All other construction details are not yet known; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used.

Operational Emissions

This air quality analysis includes estimating emissions associated with long-term operation of the project. Indirect emissions of criteria pollutants with regional impacts would be emitted by project-generated vehicle trips. In addition, localized air quality impacts (i.e., higher CO concentrations or "hot-spots") near intersections or roadway segments in the project vicinity would also potentially occur due to project-generated vehicle trips.

Consistent with SCAQMD guidance for estimating emissions associated with land use development projects, the CalEEMod computer program was used to calculate the long-term operational emissions associated with the project. As discussed in the Project Location and Description section, the proposed project would construct a 41,000 sq ft warehouse building, including office space and open assembly area. The analysis was conducted using land use codes *Unrefrigerated Warehouse – No Rail*, *City Park*, and *Parking Lot.* Trip generation rates used in CalEEMod for the project were based on the project's estimated trip generation of 70 average daily trips, including 48 passenger vehicle trips, 5 two-axle truck trips, 4 three-axle truck trips, and 13 four-axle truck trips.

In addition, consistent with the project design plans, this CalEEMod analysis incorporates selections to reflect no natural gas usage, water efficient landscape materials and low-flow fixtures, and the implementation of skylights to reduce energy consumption.

Energy

The analysis of electricity usage is based on the CalEEMod modeling, which quantifies energy use for project operations. Fuel consumption (diesel fuel and gasoline) from vehicle trips during operation was estimated for the opening year (2023) of the proposed project based on trip estimates from the CalEEMod model and average fuel economy from the U.S. Department of Transportation (USDOT).

The analysis focuses on the four sources of energy that are relevant to the proposed project: electricity, the equipment fuel necessary for project construction, and vehicle fuel necessary for project operations. For the purposes of this analysis, the amount of electricity, construction fuel, and fuel use from operations are quantified and compared to that consumed in San Bernardino County. The electricity use of the proposed project is analyzed as a whole on an annual basis.

Greenhouse Gases

GHG emissions associated with the project would occur over the short term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term GHG emissions associated with project-related vehicular trips. Recognizing that the field of global climate change analysis is rapidly evolving, the approaches advocated most recently indicate that, for determining a project's contribution to GHG emissions, lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, construction activities, and any other significant source of emissions within the project area. The CalEEMod results were used to quantify GHG emissions generated by the project.

THRESHOLDS OF SIGNIFICANCE

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would do any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is in nonattainment under applicable federal or State ambient air quality standards;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) affecting a substantial number of people.

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse energy impact if the project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse GHG emission impact if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reduction the emissions of GHGs.

Certain air districts (e.g., SCAQMD) have created guidelines and requirements to conduct air quality analysis. SCAQMD's current guidelines, the *CEQA Air Quality Handbook*[20] with associated updates, were followed in this assessment of air quality impacts for the proposed project.

Regional Emissions Thresholds

SCAQMD has established daily emission thresholds for construction and operation of a proposed project in the Basin. The emission thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks. Table B lists the CEQA significance thresholds for construction and operational emissions established for the Basin.

[20] South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook.* Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993) (accessed November 2022).

Table B: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Threshold (lbs/day)					
	VOCs	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_X
Construction	75	100	550	150	55	150
Operations	55	55	550	150	55	150

Source: SCAQMD Air Quality Significance Thresholds, April 2019.Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2 (accessed November 2022).

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds

Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which SCAQMD developed and that apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 ppm
- California State 8-hour CO standard of 9 ppm

Localized Impacts Analysis

The SCAQMD published its *Final Localized Significance Threshold Methodology* in July 2008, recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors.[21] This guidance was used to analyze potential localized air quality impacts associated with construction of the proposed project. Localized significance thresholds (LSTs) are developed based on the size or total area of the emission source, the ambient air quality in the source receptor area, and the distance to the project. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality.

LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For the proposed project, the appropriate SRA for the LST is the nearby Central San Bernardino Valley (SRA 34). SCAQMD provides LST screening tables for 25, 50, 100, 200, and 500-meter source-receptor distances. As identified above, the closest sensitive receptors to the project site are residential uses including the single-family homes located approximately 100 feet (30 meters) west from the project site boundary across Almond Street. Based on the anticipated construction equipment, it is assumed that the

[21] SCAQMD. 2008b. *Final Localized Significance Threshold Methodology*. July.

maximum daily disturbed acreage for the proposed project would be 3.5 acres.[22] Table C lists the emissions thresholds that apply during project construction and operation.

Table C: SCAQMD LSTs

Emissions Source	Pollutant Emissions Threshold (lbs/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Construction	226.0	1,473.0	15.0	6.4
Operations	226.0	1,473.0	4.1	1.7

Source: South Coast Air Quality Management District (2008b).
CO = carbon monoxide
lbs/day = pounds per day
LSTs = localized significance thresholds
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SCAQMD = South Coast Air Quality Management District

Greenhouse Gas Emissions

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting held in September 2010 (Meeting No. 15), SCAQMD proposed to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency:

- **Tier 1. Exemptions:** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

- **Tier 2. Consistency with a Locally Adopted GHG Reduction Plan:** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

- **Tier 3. Numerical Screening Threshold:** If GHG emissions are less than the numerical screening-level threshold, project-level and cumulative GHG emissions are less than significant.

- For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. SCAQMD, under Option 1, is proposing a "bright-line" screening-level threshold of 3,000 metric tons (MT) of CO_2e (or MT CO_2e) per year (or MT CO_2e/year) for all land use types or, under Option 2, the following land-use-specific thresholds: 1,400 MT CO_2e commercial projects; 3,500 MT CO_2e for residential projects; or 3,000 MT CO_2e for mixed-use projects. This bright-line threshold is based on a review of the OPR database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore,

[22] SCAQMD. n.d. *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf (accessed November 2022).

projects that do not exceed the bright-line threshold would have a nominal and therefore less than cumulatively considerable impact on GHG emissions

- **Tier 4. Performance Standards:** If emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. The SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold. The current recommended approach is per-capita efficiency targets. The SCAQMD is not recommending use of a percentage emissions reduction target. Instead, the SCAQMD proposes proposed a 2020 efficiency target of 4.8 metric tons of carbon dioxide equivalent (MT CO_2e) per year per service population for project-level analyses and 6.6 MT CO_2e per year per service population for plan-level projects (e.g., program-level projects such as General Plans). The GHG efficiency metric divides annualized GHG emissions by the service population, which is the sum of residents and employees, per the following equation:

  Rate of Emission: GHG Emissions (MT CO_2e/year) ÷ Service Population

- The efficiency evaluation consists of comparing the project's efficiency metric to efficiency targets. Efficiency targets represent the maximum quantity of emissions each resident and employee in the State of California could emit in various years based on emissions levels necessary to achieve the statewide GHG emissions reduction goals. A project that results in a lower rate of emissions would be more efficient than a project with a higher rate of emissions, based on the same service population. The metric considers GHG reduction measures integrated into a project's design and operation (or through mitigation).

For the purpose of this analysis, the proposed project will be compared to the threshold of 3,000 MT CO_2e/year for all land use types. The project is also evaluated for compliance with the County's Greenhouse Gas Reduction Plan and the 2022 Scoping Plan.

IMPACT ANALYSIS

This section identifies potential air quality, energy, and GHG impacts associated with implementation of the proposed project.

Air Quality Impacts

Air pollutant emissions associated with the project would occur over the short term from construction activities and over the long term from operational activities associated with the proposed land uses.

Consistency with Applicable Air Quality Plans

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

The County's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD Air Quality Management Plan (AQMP). Pursuant to the methodology provided in the SCAQMD *CEQA Air Quality Handbook,* consistency with the Basin 2022 AQMP is affirmed when a project (1) would not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented as follows:

1. The project would result in short-term construction and long-term operational pollutant emissions that are all less than the CEQA significance emissions thresholds established by SCAQMD, as demonstrated below; therefore, the project would not result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standards violation.

2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities. As discussed in the Project Location and Description, the proposed project is seeking a General Plan Amendment that would change the current land use designation from MDR IC. However, the proposed project would consist of a 41,000 sq ft warehouse building. Based on the proposed project size, the proposed project is not considered a project of statewide, regional, or areawide significance (e.g., large-scale projects such as airports, electrical generating facilities, petroleum and gas refineries, residential developments of more than 500 dwelling units, and shopping centers or business establishments employing more than 1,000 persons or encompassing more than 500,000 sq ft of floor space) as defined in the CCR (Title 14, Division 6, Chapter 3, Article 13, Section 15206(b)). Because the proposed project would not be defined as a regionally significant project under CEQA, it does not meet the SCAG's Intergovernmental Review criteria. Therefore, the proposed project is not defined as significant.

Based on the consistency analysis presented above, the proposed project would be consistent with the regional AQMP.

Criteria Pollutant Analysis

The Basin is currently designated as nonattainment for the federal and State standards for O_3 and $PM_{2.5}$. In addition, the Basin is in nonattainment for the PM_{10} standard. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of an ambient air quality standard. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in

significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by demolition, grading, building construction, paving, and other activities. Emissions from construction equipment are also anticipated and would include CO, nitrogen oxides (NO_X), VOC, directly emitted $PM_{2.5}$ or PM_{10}, and toxic air contaminants such as diesel exhaust particulate matter.

Project construction activities would include demolition, grading, site preparation, building construction, architectural coating, and paving activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. SCAQMD has established Rule 403: Fugitive Dust, which would require the applicant to implement measures that would reduce the amount of particulate matter generated during the construction period. The Rule 403 measures that were incorporated in this analysis include:

- Water active sites at least three times daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour or less.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur oxides (SO_X), NO_X, VOCs, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod and are summarized in Table D. Attachment B provides CalEEMod output sheets.

Table D: Short-Term Regional Construction Emissions

Construction Phase	Maximum Daily Regional Pollutant Emissions (lbs/day)							
	VOCs	NO_X	CO	SO_X	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
Demolition	0.9	21.3	15.9	<0.1	0.2	0.7	0.1	0.7
Site Preparation	0.5	15.0	10.1	<0.1	2.9	0.4	1.4	0.4
Grading	0.7	18.1	12.5	<0.1	3.3	0.5	1.6	0.5
Building Construction	1.0	17.9	14.9	<0.1	0.5	0.7	0.1	0.7
Architectural Coating	8.7	2.4	2.1	<0.1	0.1	0.1	<0.1	0.1
Paving	0.7	11.8	10.3	<0.1	0.1	0.4	<0.1	0.4
Peak Daily Emissions	**9.7**	**21.3**	**17.0**	**<0.1**	**3.8**		**2.1**	
SCAQMD Threshold	**75.0**	**100.0**	**550.0**	**150.0**	**150.0**		**55.0**	
Significant?	**No**	**No**	**No**	**No**	**No**		**No**	

Source: Compiled by LSA (November 2022).
Note: Values may not appear to add up correctly due to rounding. The building construction and architectural coating phases may overlap.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in Table D, construction emissions associated with the project would not exceed the SCAQMD's thresholds for VOC, NO_x, CO, SO_x, $PM_{2.5}$, and PM_{10}. Therefore, construction of the proposed project would not result in a cumulatively considerable increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard.

Operational Impacts. Long-term air pollutant emissions associated with operation of the proposed project include emissions from area, energy, and mobile sources. Mobile-source emissions are from vehicle trips associated with operation of the project. Area-source emissions would consist of direct sources of air emissions at the project site, including architectural coatings, consumer products, and use of landscape maintenance equipment.

PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other particulate matter emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy-source emissions result from activities in buildings that use natural gas. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source. The proposed project would not include natural gas. Therefore, the project would not result in any energy-source related emissions.

Area-source emissions would consist of direct sources of air emissions at the project site, including architectural coatings, consumer products, and use of landscape maintenance equipment.

Long-term operational emissions associated with the proposed project were calculated using CalEEMod. Table E provides the proposed project's estimated operational emissions. Attachment B provides CalEEMod output sheets.

Table E: Project Operational Emissions

Emission Type	Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	0.9	<0.1	<0.1	0.0	<0.1	<0.1
Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
Mobile Sources	0.3	1.4	2.9	<0.1	0.7	0.2
Total Project Emissions	**1.2**	**1.4**	**2.9**	**<0.1**	**0.7**	**0.2**
SCAQMD Threshold	**55.0**	**55.0**	**550.0**	**150.0**	**150.0**	**55.0**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (November 2022).
Note: Some values may not appear to add correctly due to rounding.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

The results shown in Table E indicate the proposed project would not exceed the significance criteria for daily VOC, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$ emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard.

Long-Term Microscale (CO Hot Spot) Analysis

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Fontana Monitoring Station located at 14360 Arrow Boulevard (the closest station to the project site) showed a highest recorded 1-hour concentration of 2.7 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of

1.4 ppm (the State standard is 9 ppm) from 2019 to 2021[23]. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

The proposed project is expected to generate approximately 70 ADT, with 6 trips occurring in the AM peak hour and 6 trips occurring in the PM peak hour. The CO concentrations are not expected to increase significantly as a result of the proposed project. Therefore, given the extremely low level of CO concentrations in the project area and the lack of traffic impacts at any intersections, project-related vehicles are not expected to result in CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the project would not result in any project-related impacts on CO concentrations.

Localized Significance Analysis

Project construction and operation emissions were compared to the LST screening tables in SRA 34, based on a 30-meter source-receptor distance and a disturbed acreage of 3.5 acres. The results of the LST analysis, summarized in Tables F and G, indicate that the project would not result in an exceedance of the SCAQMD LSTs during project construction or operation.

Table F: Project Localized Construction Emissions (in Pounds Per Day)

Source	NO_x	CO	PM_{10}	$PM_{2.5}$
On-Site Project Emissions	21.0	15.0	3.7	2.0
Localized Significance Threshold	226.0	1,473.0	15.0	6.4
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (November 2022).
Note: Source Receptor Area 34, based on a 3.5-acre construction disturbance daily area, at a distance of 104 meters from the project boundary.
CO= carbon monoxide
NO_x= nitrogen oxides
$PM_{2.5}$= particulate matter less than 2.5 microns in size
PM_{10}= particulate matter less than 10 microns in size

Table G: Project Localized Operational Emissions (in Pounds Per Day)

Source	NO_x	CO	PM_{10}	$PM_{2.5}$
On-Site Project Emissions	<1.0	<1.0	<1.0	<1.0
Localized Significance Threshold	226.0	1,473.0	4.1	1.7
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (November 2022).
Note: Source Receptor Area 34, based on a 3.5-acre construction disturbance daily area, at a distance of 104 meters from the project boundary.
CO= carbon monoxide
NO_x= nitrogen oxides
$PM_{2.5}$= particulate matter less than 2.5 microns in size
PM_{10}= particulate matter less than 10 microns in size

[23] CARB. 2020. iADAM Air Quality Data Statistics. Website: https://www.arb.ca.gov/adam/topfour/topfour1.php (accessed November 2022).

Odors

Heavy-duty equipment on the project site during construction would emit odors, primarily from equipment exhaust. However, the construction activity would cease after individual construction is completed. No other sources of objectionable odors have been identified for the proposed project.

SCAQMD Rule 402 regarding nuisances states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." The proposed uses are not anticipated to emit any objectionable odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Energy Impacts

The following describes the potential impacts regarding energy resources that could result from implementation of the proposed project and evaluates whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with any applicable plans for renewable energy and energy efficiency.

Consumption of Energy Resources

Construction Energy Use. Construction would begin on May 1, 2023, and would end on October 15, 2023. The project would require energy for activities such as the manufacture and transportation of building materials, grading activities, and building construction. Construction of the proposed project would require electricity to power construction-related equipment. Construction of the proposed project would not involve the consumption of natural gas. The construction-related equipment would not be powered by natural gas, and no natural gas demand is anticipated during construction.

Transportation energy represents the largest energy use during construction and would occur from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use petroleum fuels (e.g., diesel fuel and/or gasoline). Therefore, the analysis of energy use during construction focuses on fuel consumption. Construction trucks and vendor trucks hauling materials to and from the project site would be anticipated to use diesel fuel, whereas construction workers traveling to and from the project site would be anticipated to use gasoline-powered vehicles. Fuel consumption from transportation uses depends on the type and number of trips, VMT, the fuel efficiency of the vehicles, and the travel mode.

Impacts related to energy use during construction would be temporary and relatively small in comparison to San Bernardino County's overall use of the State's available energy resources. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the State. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. The project would not cause or result in the need for

additional energy facilities or an additional or expanded delivery system. For these reasons, fuel consumption during construction would not be inefficient, wasteful, or unnecessary.

Operational Energy Use. Energy use includes both direct and indirect sources of emissions. Direct sources of emissions include on-site natural gas usage for heating, while indirect sources include electricity generated by off-site power plants. The proposed project would not include natural gas, and no natural gas demand is anticipated during operation of the proposed project.

CalEEMod divides building electricity and natural gas use into uses that are subject to Title 24 standards and those that are not. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24 (e.g., space heating, space cooling, water heating, and ventilation). Non-Title 24 uses include all other end uses (e.g., appliances, electronics, and other miscellaneous plug-in uses). Because some lighting is not considered as part of the building envelope energy budget, CalEEMod considers lighting as a separate electricity use category.

For natural gas, uses are likewise categorized as Title 24 or non-Title 24. Title 24 uses include building heating and hot water end uses. Non-Title 24 natural gas uses include appliances.

Table H shows the estimated potential increased electricity, gasoline, and diesel demand associated with the proposed project. The electricity rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the traffic analysis in conjunction with USDOT fuel efficiency data.

Table H: Estimated Annual Energy Use of the Proposed Project

Land Use	Electricity Use (kWh/yr)	Gasoline (gal/yr)	Diesel (gal/yr)
Industrial	102,820	8,217	13,996

Source: Compiled by LSA (November 2022).
gal/yr = gallons per year
kWh/yr = thousand kilowatt-hours per year

As shown in Table H, the estimated electricity demand associated with the proposed project is 102,820 kWh per year. In 2020, California consumed approximately 277,750 GWh or 277,750,000,000 kWh. Of this total, San Bernardino County consumed 15,968.5 GWh or 15,968,515,536 kWh[24]. Therefore, electricity demand associated with the proposed project would be approximately less than 0.01 percent of San Bernardino County's total electricity demand.

Furthermore, the proposed project would result in energy usage associated with gasoline and diesel to fuel project-related trips. The average fuel economy for light-duty vehicles (automobiles, pickups, vans, and SUVs) in the United States has steadily increased, from about 14.9 mpg in 1980 to 22.9

[24] California Energy Commission (CEC). 2021a. *2020 Total System Electric Generation*. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation (accessed November 2022).

mpg in 2020[25] . The average fuel economy for heavy-duty trucks in the United States has also steadily increased, from 5.7 mpg in 2013 to a projected 8.0 mpg in 2021[26].

Using the USEPA gasoline fuel economy estimates for 2020, the California diesel fuel economy estimates for 2021, and the traffic data from the project traffic analyses, the proposed project would result in the annual consumption of 8,217 gallons of gasoline and 13,996 gallons of diesel fuel. In 2021, vehicles in California consumed approximately 13.8 billion gallons of gasoline[27]. Therefore, gasoline demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California and, by extension, in San Bernardino County.

In addition, vehicles associated with trips to and from the project site would be subject to fuel economy and efficiency standards, which are applicable throughout the State. As such, the fuel efficiency of vehicles associated with project operations would increase throughout the life of the proposed project. Therefore, implementation of the proposed project would not result in a substantial increase in transportation-related energy uses.

Conflict with Renewable Energy or Energy Efficiency Plans

In 2002, the Legislature passed SB 1389, which required the CEC to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels for the Integrated Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for ZEVs and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The CEC recently adopted the *2022 Integrated Energy Policy Report Update*.[28] The Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. The County of San Bernardino relies on the State integrated energy plan and does not have its own local plan to address renewable energy or energy efficiency.

As indicated above, energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the overall use in the County. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the overall use in San Bernardino County, and the State's available energy resources. Therefore, energy impacts at the regional level would be negligible. Because California's energy

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25 U.S. Department of Transportation (USDOT). "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: https://www.bts.dot.gov/bts/bts/content/average-fuel-efficiency-us-light-duty-vehicles (accessed November 2022).

26 California Energy Commission (CEC). 2015. Medium and Heavy-Duty Truck Prices and Fuel Economy 2013–2026. Website: efiling.energy.ca.gov/getdocument.aspx?tn=206180 (accessed October 2022).

27 California Energy Commission (CEC). 2015. Medium and Heavy-Duty Truck Prices and Fuel Economy 2013–2026. Website: efiling.energy.ca.gov/getdocument.aspx?tn=206180 (accessed October 2022).

28 CEC. 2022a. *2022 Integrated Energy Policy Report Update*. Docket No. 21-IEPR-01.

conservation planning actions are conducted at a regional level, and because the proposed project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's Integrated Energy Policy Report. Additionally, as demonstrated above, the proposed project would not result in the inefficient, wasteful, and unnecessary consumption of energy. Potential impacts related to conflict with or obstruction of a State or local plan for renewable energy or energy efficiency would be less than significant, and no mitigation is required.

Generation of Greenhouse Gas Emissions

This section describes the proposed project's construction- and operation-related GHG emissions and its contribution to global climate change. SCAQMD has not addressed emission thresholds for construction in its *CEQA Air Quality Handbook*; however, SCAQMD requires quantification and disclosure. Thus, this section discusses construction emissions.

Construction Greenhouse Gas Emissions. Demolition and construction activities associated with the proposed project would produce combustion emissions from various sources. Construction would emit GHGs through the operation of construction equipment and from worker and builder supply vendor vehicles for the duration of the approximately 5-month construction period. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, the fueling of heavy equipment emits CH_4. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As indicated above, SCAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. SCAQMD then requires the construction GHG emissions to be amortized over the life of the project, defined as 30 years, added to the operational emissions, and compared to the applicable interim GHG significance threshold tier. Table I shows CO_2e emission calculations for each respective construction phase of the proposed project.

Table I: Construction Greenhouse Gas Emissions

Construction Phase	Greenhouse Gas Emissions, CO_2e (Metric Tons per Year)
Demolition	11.4
Site Preparation	4.0
Grading	4.8
Building Construction	105.5
Paving	7.1
Architectural Coating	6.5
Total Project Construction Emissions	**139.3**
Total Construction Emissions Amortized over 30 Years	**4.6**

Source: Compiled by LSA (November 2022).
Note: Numbers may not appear to add correctly due to rounding.
CO_2e = carbon dioxide equivalent

As indicated in Table I, it is estimated that the project would generate 139.3 MT CO_2e during construction of the project. When amortized over the 30-year life of the project, annual emissions would be 4.6 MT CO_2e.

Operational Greenhouse Gas Emissions. Long-term operation of the proposed project would generate GHG emissions from area, mobile, waste, and water sources, as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions would include project-generated vehicle trips associated with trips to the amenity uses associated with the proposed project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site and other sources. Waste-source emissions generated by the proposed project include energy generated by landfilling and other methods of disposal related to transporting and managing project-generated waste. In addition, water-source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

GHG emissions were estimated using CalEEMod. Table J shows the estimated operational GHG emissions for the proposed project. Motor vehicle emissions are the largest source of GHG emissions for the project, at approximately 72 percent of the project total. Water sources are the next largest category, at approximately 13 percent. Waste and energy sources are approximately 8 percent and 7 percent of the total emissions, respectively. Attachment B provides additional calculation details.

Table J: GHG Emissions (Metric Tons per Year)

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

Source: LSA (November 2022).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
N_2O = nitrous oxide
SCAQMD = South Coast Air Quality Management District

As discussed above, a project would have less than significant GHG emissions if it would result in operation-related GHG emissions of less than 3,000 MT CO_2e per year. Based on the analysis results, the proposed project would result in 244.3 CO_2e per year, which would be below the numeric threshold of 3,000 MT CO_2e per year. Therefore, operation of the proposed project would not generate significant GHG emissions that would have a significant effect on the environment.

Consistency with Greenhouse Gas Reduction Plans

An evaluation of the proposed project's consistency with the County's Greenhouse Gas Reduction Plan, the 2022 Scoping Plan, and the 2020–2045 RTP/SCS is provided below.

San Bernardino County Regional Greenhouse Gas Reduction Plan As discussed above, the San Bernardino County Regional Greenhouse Gas Reduction Plan identifies the County's vision and goals on reducing GHG emissions in the different cities, local government facilities, and communities. Table K below presents the proposed project's compliance with each reduction measure evaluated for the County, as identified in the San Bernardino County Regional Greenhouse Gas Reduction Plan.

Table K: Project Consistency with the County of San Bernardino GHG Reduction Measures

Measure	Description	Project Consistency
Building Energy		
Energy-1. Energy Efficiency Incentives and Programs to Promote Energy Efficiency for Existing Buildings	• Promote energy efficiency in existing residential and nonresidential buildings and remove funding barriers to energy-efficiency improvements.	***Not Applicable.*** This measure is not applicable as the proposed project would not retrofit an existing building.
Energy-2. Outdoor Lighting Upgrades for Existing Development	• Adopt outdoor lighting standards in the zoning ordinance to reduce electricity consumption. This could be achieved by requiring a percentage of outdoor lighting fixtures to use LED bulbs by 2030.	***Not Applicable.*** This measure is not applicable as the proposed project would not retrofit an existing building.
Energy-3. Building Electrification –	• Adopt building electrification targets and incentives, for both new commercial and residential buildings and retrofits. Establish a goal that a percentage of new and existing buildings use electric HVAC and water heating systems.	***Consistent***. The proposed project would comply with the CALGreen Code, regarding energy conservation and green building standards. In addition, the proposed project would have solar roof ready areas and energy efficient heating, ventilation, and air conditioning (HVAC) equipment.
Energy-4. Solar Installations for New Commercial/Industrial Development	• Establish a goal for solar installations on new commercial and industrial development to be achieved before 2030.	***Consistent.*** The proposed project would comply with the CALGreen Code, regarding energy conservation and green building standards. In addition, the proposed project would have solar roof ready areas.
Energy-5. On-Site Solar Energy for New and Existing Warehouse Space	• Promote and incentivize solar installations on existing and new warehouse space through partnerships with SCE and other private sector funding sources including SunRun, Tesla, and other solar lease or Power Purchase Agreement (PPA) companies. Establish a goal that a percentage of new and existing warehousing projects install solar on a percentage of the building's roof space.	***Consistent.*** The proposed project would comply with the CALGreen Code, regarding energy conservation and green building standards. In addition, the proposed project would have solar roof ready areas.
Energy-6. Solar Installations for Existing Housing	• Establish a goal for solar installations on existing single-family homes to be achieved before 2030.	***Not Applicable.*** This measure is not applicable as the

Table K: Project Consistency with the County of San Bernardino GHG Reduction Measures

Measure	Description	Project Consistency
		proposed project would not retrofit an existing building.
Energy-7. Solar Installations for Existing Commercial/Industrial Buildings	• Establish a goal for solar installations on existing commercial/industrial buildings to be achieved before 2030.	***Not Applicable.*** This measure is not applicable as the proposed project would not retrofit an existing residential building.
Land Use		
Land Use-1. Promote Rooftop Gardens	• Establish a goal for 5% of new multifamily residences and 15% of new commercial facilities over 100,000 sq ft to construct rooftop gardens. Rooftop green space insulates the building underneath and increases energy efficiency. Rooftop gardens also cool the surrounding area through moisture retention and surface reflectivity. This measure could also reduce energy consumption and associated GHG emissions in the building energy sector.	***Not Applicable.*** The proposed project would include a speculative warehouse building.
Land Use-2. Urban Tree Planting	• Establish a jurisdiction-wide tree planting goal or tree preservation goal. Possible implementation mechanisms might include a requirement to account for trees removed and planted as part of new construction and/or establishing a goal and funding source for new trees planted on jurisdiction property. This measure will reduce energy consumption and associated GHG emissions in the building energy sector by reducing the heat island effect.	***Consistent.*** The proposed project would include approximately 15,000 sq ft of drought tolerant landscape.
On-Road		
OnRoad-1. Alternative Fueled Transit Fleet- CNG to Electric	• The majority of the transit fleet in the County is currently compressed natural gas (CNG). Converting from CNG to electric would reduce GHG emissions because electricity from renewable sources produces less emissions than natural gas.	***Not Applicable.*** The proposed project would not involve County fleet vehicles.
OnRoad-2. Encourage Use of Mass Transit, carpooling Ridesharing, and Telecommunicating	• Commute Trip Reduction programs aim to reduce commute trips and vehicle miles traveled (VMT) through various strategies. The strategies include encouraging the use of mass transit, carpooling, ridesharing, and telecommuting. The level of VMT reductions that this measure could achieve depends on the level of commitment, from completely voluntary to required implementation with monitoring and performance standards. Jurisdictions could start implementing this measure for government employees, and then expand to adopting an ordinance to require businesses to implement Commute Trip Reduction programs. This measure only reduces commute trip VMT; it is assumed that commute trip VMT makes up 30% of total VMT.	***Not Applicable.*** The proposed project would include a speculative warehouse building. Future tenants of the building would implement mass transit encouragement measures as applicable.

Table K: Project Consistency with the County of San Bernardino GHG Reduction Measures

Measure	Description	Project Consistency
OnRoad-3. Improve Efficiency through Signal Synchronization	• Signal synchronization could improve traffic flow and reduce GHG emissions due to less idling time and less stop-and-go driving. Signal timing optimization could be done with or without real-time traffic data.	***Not Applicable.*** The proposed project would generate 70 daily trips, including 6 AM peak hour trips and 6 PM peak hour trips. Based on the minimal peak hour trips generated by the proposed project, the project would not be required to implement transportation demand management strategies or signal synchronization.
OnRoad-4. Expand Bike Routes Including Pedestrian and Bicycle Friendly Streets	• Pedestrian- and bicycle-friendly roads are crucial to promoting walking and bicycle use as a transportation method. People tend to walk or bicycle if sidewalks and bicycle routes are available and separate from motor vehicles so that pedestrians' and bicyclists' safety can be ensured. Adopting and implementing a bicycle master plan and constructing more bicycle routes would encourage more bicycle rides and would help to reduce VMT.	***Not Applicable.*** The proposed project would not construct or modify roadways.
On-Road-5. Community Fleet Electrification	• Hybrid electric vehicles, plug-in hybrid electric vehicles, and all-electric vehicles (EVs) produce lower emissions than conventional vehicles. All EV types emit at least 40% less GHG emissions than conventional vehicles. However, more than 95% of people still drive conventional gasoline or diesel vehicles, so programs to encourage the use of EV or hybrid vehicle ownership are greatly needed.	***Not Applicable.*** The proposed project would not involve County fleet vehicles.
Off-Road Equipment		
Off-Road Equipment-1. Electric Powered Construction Equipment	• Establish a goal such that a percentage of construction equipment utilizes electricity to power. With current technology, equipment with relatively low horsepower could be converted to electric. Potential goals might be to require 80-100% of equipment that is less than 120 horsepower to be electric powered.	***Not consistent.*** The proposed project would utilize Tier 2 construction equipment as required by current California Air Resources Board (CARB) regulations, and the project would comply with South Coast Air Quality Management District (SCAQMD) Rule 403 measures.
Off-Road Equipment-2. Idling Ordinance	• Adopt an ordinance that limits idling time for heavy-duty diesel trucks beyond CARB or local air district regulations and if not already required as part of CEQA mitigation. Recommended idling limit is 3 minutes. As part of permitting requirements or city contracts, encourage contractors to submit a construction vehicle management plan that includes such things as idling time requirements; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all on-	***Consistent.*** The proposed project would comply with state law for idling times.

Table K: Project Consistency with the County of San Bernardino GHG Reduction Measures

Measure	Description	Project Consistency
	site equipment. State law currently requires all off-road equipment fleets to limit idling to no more than 5 minutes.	
Off-Road Equipment-3. Electric Landscaping Equipment	• Adopt an ordinance that reduces gasoline or diesel-powered landscaping equipment use. With current technology, equipment with relatively low horsepower could be converted to electric. Potential goals might be to require 80-100% of equipment that is less than 120 horsepower to be electric powered. Jurisdictions would work in close cooperation with the air district in drafting an ordinance or developing outreach programs to be consistent with current air district rules and CEQA guidelines.	***Not applicable.*** The proposed project would include a speculative warehouse building. Future tenants of the building would be able to convert to electric landscape equipment.
Solid Waste Management		
Waste-1. Increased Waste Diversion	• Exceed the waste diversion goal (75%) required by Assembly Bill (AB) 341 by adopting citywide waste goals to divert more than 75% of waste. In instances where cities operate their own waste services programs, they will have responsibility to expand or establish composting, recycling, and yard waste programs to residences and businesses. Cities would work with waste providers to identify a baseline, opportunities, and achievable diversion goals before a certain time period, all of which can be incorporated into the waste provider's contract with a jurisdiction.	***Consistent.*** The proposed project would be consistent with County Solid Waste and State requirements for waste reduction.
Water Conveyance		
Water-1. Require Adoption of the Voluntary CALGreen Water Efficiency Measures for New Construction	• Require adoption of the voluntary CALGreen water efficiency measures (at least Tier 1) for new construction. CALGreen voluntary measures recommend use of certain water efficient appliances, plumbing and irrigation systems, as well as more aggressive water-savings targets. Update building standards and codes for new residential and nonresidential buildings to require adoption of these voluntary measures, including: o Use of low-water irrigation systems. o Installation of rainwater and gray water systems. o Installation of water-efficient appliances and plumbing fixtures, as well as composting toilets.	***Consistent.*** The proposed project would comply with the CALGreen Code, regarding water conservation and green building standards.
Water-2. Require Adoption for the Voluntary CALGreen Water Efficiency for Existing Construction	• Require adoption of the voluntary CALGreen water efficiency measures for existing construction. CALGreen voluntary measures recommend use of certain water-efficient appliances, plumbing and irrigation systems, as well as more aggressive water-savings targets.	***Consistent.*** The proposed project would comply with the CALGreen Code, regarding water conservation and green building standards.

Table K: Project Consistency with the County of San Bernardino GHG Reduction Measures

Measure	Description	Project Consistency
Water-3. Encourage Water-Efficient Landscaping Practices	• Encourage water-efficient landscaping practices. Adopt a landscaping water conservation ordinance that exceeds the requirements in the Model Landscape Ordinance (AN 1881).	***Consistent.*** The proposed project would comply with the CALGreen Code, regarding water conservation and green building standards. In addition, the proposed project would implement low maintenance, drought tolerant landscape and low flow toilets and sinks throughout.
Agriculture		
Agriculture-1. Methane Capture at Large Dairies	• This is a voluntary measure to be undertaken by large dairies and encourages the installation of methane digesters to capture methane emissions from the decomposing manure. The methane could be used on site as an alternative to natural gas in combustion, power production, or as a transportation fuel. Further, individual project proponents may be able to sell GHG credits associated with these installations on the voluntary carbon market.	***Not Applicable.*** This measure is not applicable as the proposed project would not include agricultural uses.
Wastewater Treatment and Discharge		
Wastewater 1- Methane Recovery	• Work with the Inland Empire Utilities Agency (IEUA) or other local wastewater treatment providers to identify funding and cooperating agencies for establishing methane recovery systems at all wastewater treatment plants (WWTPs) that service the County residents. WWTPs in the region operated by IEUA, City of San Bernardino, and Victor Valley Wastewater Agency (VVWA) already have approximately 62% methane capture rate. Jurisdictions serviced by these providers would only benefit from this measure if the methane capture rate could be increased. For WWTPs that currently do not have methane capture systems, plants operators would work with regional power providers, local jurisdictions, or other entities to identify funding for methane capture system installation.	***Not Applicable.*** The proposed project would not include a wastewater treatment plant.
Wastewater-2. Energy Efficiency Equipment Upgrades at Wastewater Treatment Plants (Regional)	• Work with IEUA or other local wastewater treatment provider to upgrade and replace wastewater treatment and pumping equipment with more energy-efficient equipment, as is financially feasible, at the existing facilities. Require all pumping and treatment equipment to be 25% more energy efficient at the time of replacement. Utilize best management practices for the treatment of waste. This measure could also include assessing the feasibility of using advance treatment of recycled water with microfiltration or reverse osmosis for future potable water use. Assess	***Not Applicable.*** The proposed project would not include a wastewater treatment plant.

Table K: Project Consistency with the County of San Bernardino GHG Reduction Measures

Measure	Description	Project Consistency
	associated energy/GHG tradeoffs and out of basin water supply.	
GHG Performance Standard for New Development		
PS-1. GHG Performance Standard for New Development	• Individual jurisdictions may adopt a GHG Performance Standard for New Development (PS-1) that would provide a streamlined and flexible program for new residential and nonresidential projects to reduce their emissions. The PS would be a reduction standard for new private developments as part of the discretionary approval process under CEQA. Under PS-1, new projects would be required to quantify project-generated GHG emissions and adopt feasible reduction measures to reduce project emissions to a level that is a certain percent below Business-as-Usual (BAU) project emissions. PS-1 does not require project applicants to implement a pre-determined set of measures. Rather, project applicants are allowed to choose the most appropriate measures for achieving the percent reduction goal, while taking into consideration cost, environmental or economic benefits, schedule, and other project requirements.	***Not applicable.*** The proposed project would include a speculative warehouse building. Future tenants of the building would be required to quantify GHG emissions and adopt new reduction measures as necessary.

Source: Compiled by LSA (November 2022).

CARB Scoping Plan.EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reduction target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. CARB released the 2017 Scoping Plan to reflect the 2030 target set by EO B-30-15 and codified by SB 32.[29] SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 that is intended to provide easier public access to air emission data collected by the CARB was posted in December 2016.

The 2022 Scoping Plan[30] assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

29 CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

30 CARB. 2021. op. cit.

As identified above, the Scoping Plan contains GHG reduction measures that work toward reducing GHG emissions, consistent with the targets set by EO B-30-15, and codified by SB 32 and AB 197. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below.

Energy efficiency measures are intended to maximize energy-efficient building and appliance standards; pursue additional efficiency efforts, including new technologies and new policy and implementation mechanisms; and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As identified above, the proposed project would comply with the 2022 CALGreen Code standards regarding energy conservation and green building. In addition, the proposed project would include on-site hydrogen and solar photovoltaic generation, hydrogen storage, and a BESS. Therefore, the proposed project would comply with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the project would be required to comply with the 2022 CALGreen Code standards, which include a variety of different measures, including reduction of wastewater and water use. In addition, the proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emission reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. However, vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals.

SCAG's Regional Transportation Plan/Sustainable Communities Strategy. SCAG's 2020–2045 RTP/SCS was adopted on September 3, 2020. SCAG's RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high-quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The core vision in the 2020–2045 RTP/SCS is to better manage the existing transportation system through design management strategies, integrate land use decisions and technological advancements, create complete streets that are safe to all roadway users, preserve the transportation system, and expand transit and foster development in transit-oriented communities. The 2020–2045 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as a forecasted development pattern that is generally consistent with regional-level General Plan data. The forecasted development pattern, when integrated with the financially constrained transportation

investments identified in the 2020–2045 RTP/SCS, would reach the regional target of reducing GHG emissions from automobiles and light-duty trucks by 8 percent per capita by 2020 and 19 percent by 2035 (compared to 2005 levels). The 2020–2045 RTP/SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the 2020–2045 RTP/SCS but provides incentives for consistency for governments and developers.

Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emissions reduction targets. The proposed project would not conflict with the stated goals of the RTP/SCS; therefore, the proposed project would not interfere with SCAG's ability to achieve the region's GHG reduction targets of 8 percent below 2005 per capita emissions levels by 2020 and 19 percent below 2005 per capita emissions levels by 2035, and it can be assumed that regional mobile emissions would decrease in line with the goals of the RTP/SCS. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206, and, as such, it would not conflict with the SCAG RTP/SCS targets since those targets were established and are applicable on a regional level.

The proposed project would consist of a 41,000 sq ft warehouse building. Based on the nature of the proposed project, it is anticipated that implementation of the proposed project would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS. Therefore, the proposed project would not conflict with plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

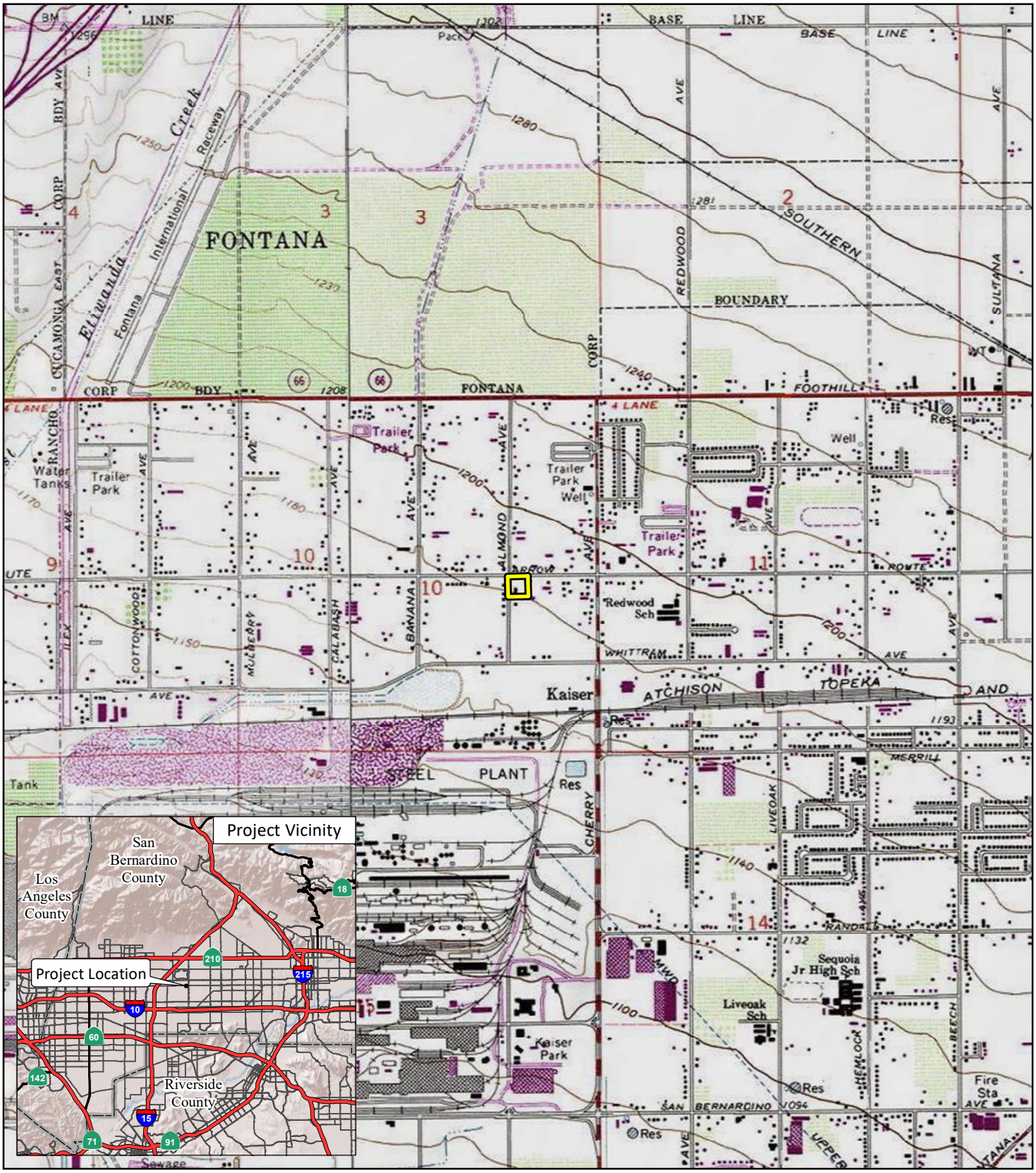
CONCLUSION

Based on the analysis presented above, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed SCAQMD thresholds of significance. Compliance with SCAQMD Rule 403: Fugitive Dust would further reduce construction dust impacts. The proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The project would also be consistent with the 2022 AQMP. The project would also not result in objectionable odors affecting a substantial number of people. With regards to GHGs, the project would not result in substantial emissions during construction or operation. Additionally, the proposed project would not conflict with the objectives embodied in EO B-30-15, SB 32, or AB 197. Therefore, the proposed project's incremental contribution to cumulative GHG emissions would not be cumulatively considerable. In addition, the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation and would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Attachments: A: Project Figures
B: CalEEMod Output Sheets

ATTACHMENT A

PROJECT FIGURES



LSA

LEGEND

Project Location

FIGURE 1

N

0 1000 2000

FEET

SOURCE: USGS 7.5' Quad - Guasti (1981); Fontana (1980), CA

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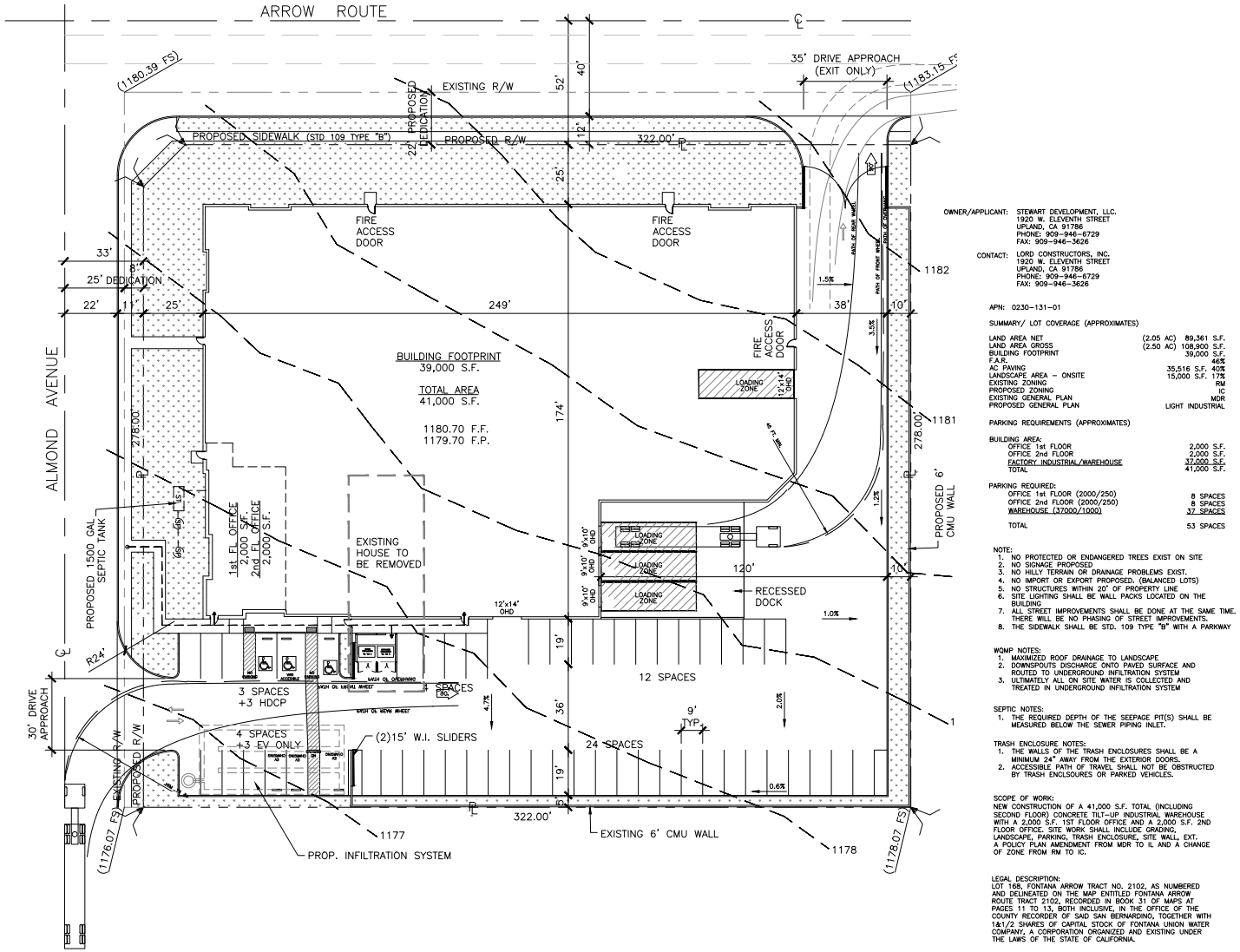
Stewart Almond Warehouse Project

Project Location and Vicinity



OWNER/APPLICANT: STEWART DEVELOPMENT, LLC.
1920 W. ELEVENTH STREET
UPLAND, CA 91786
PHONE: 909-946-6729
FAX: 909-946-3626

CONTACT: LORD CONSTRUCTORS, INC.
1920 W. ELEVENTH STREET
UPLAND, CA 91786
PHONE: 909-946-6729
FAX: 909-946-3626

APN: 0230-131-01

SUMMARY/ LOT COVERAGE (APPROXIMATES)

LAND AREA NET	(2.05 AC)	89,361 S.F.
LAND AREA GROSS	(2.50 AC)	108,900 S.F.
BUILDING FOOTPRINT		39,000 S.F.
F.A.R.		46%
AC PAVING		35,516 S.F. 40%
LANDSCAPE AREA – ONSITE		15,000 S.F. 17%
EXISTING ZONING		RM
PROPOSED ZONING		IC
EXISTING GENERAL PLAN		MDR
PROPOSED GENERAL PLAN		LIGHT INDUSTRIAL

PARKING REQUIREMENTS (APPROXIMATES)

BUILDING AREA:

OFFICE 1st FLOOR	2,000 S.F.
OFFICE 2nd FLOOR	2,000 S.F.
FACTORY INDUSTRIAL/WAREHOUSE	37,000 S.F.
TOTAL	41,000 S.F.

PARKING REQUIRED:

OFFICE 1st FLOOR (2000/250)	8 SPACES
OFFICE 2nd FLOOR (2000/250)	8 SPACES
WAREHOUSE (37000/1000)	37 SPACES
TOTAL	53 SPACES

NOTE:
1. NO PROTECTED OR ENDANGERED TREES EXIST ON SITE
2. NO SIGNAGE PROPOSED
3. NO HILLY TERRAIN OR DRAINAGE PROBLEMS EXIST.
4. NO IMPORT OR EXPORT PROPOSED. (BALANCED LOTS)
5. NO STRUCTURES WITHIN 20' OF PROPERTY LINE
6. SITE LIGHTING SHALL BE WALL PACKS LOCATED ON THE BUILDING
7. ALL STREET IMPROVEMENTS SHALL BE DONE AT THE SAME TIME. THERE WILL BE NO PHASING OF STREET IMPROVEMENTS.
8. THE SIDEWALK SHALL BE STD. 109 TYPE "B" WITH A PARKWAY

WQMP NOTES:
1. MAXIMIZED ROOF DRAINAGE TO LANDSCAPE
2. DOWNSPOUTS DISCHARGE ONTO PAVED SURFACE AND ROUTED TO UNDERGROUND INFILTRATION SYSTEM
3. ULTIMATELY ALL ON SITE WATER IS COLLECTED AND TREATED IN UNDERGROUND INFILTRATION SYSTEM

SEPTIC NOTES:
1. THE REQUIRED DEPTH OF THE SEEPAGE PIT(S) SHALL BE MEASURED BELOW THE SEWER PIPING INLET.

TRASH ENCLOSURE NOTES:
1. THE WALLS OF THE TRASH ENCLOSURES SHALL BE A MINIMUM 24" AWAY FROM THE EXTERIOR DOORS.
2. ACCESSIBLE PATH OF TRAVEL SHALL NOT BE OBSTRUCTED BY TRASH ENCLSOURES OR PARKED VEHICLES.

SCOPE OF WORK:
NEW CONSTRUCTION OF A 41,000 S.F. TOTAL (INCLUDING SECOND FLOOR) CONCRETE TILT-UP INDUSTRIAL WAREHOUSE WITH A 2,000 S.F. 1ST FLOOR OFFICE AND A 2,000 S.F. 2ND FLOOR OFFICE. SITE WORK SHALL INCLUDE GRADING, LANDSCAPE, PARKING, TRASH ENCLOSURE, SITE WALL, EXT. A POLICY PLAN AMENDMENT FROM MDR TO IL AND A CHANGE OF ZONE FROM RM TO IC.

LEGAL DESCRIPTION:
LOT 168, FONTANA ARROW TRACT NO. 2102, AS NUMBERED AND DELINEATED ON THE MAP ENTITLED FONTANA ARROW ROUTE TRACT 2102, RECORDED IN BOOK 31 OF MAPS AT PAGES 11 TO 13, BOTH INCLUSIVE, IN THE OFFICE OF THE COUNTY RECORDER OF SAID SAN BERNARDINO, TOGETHER WITH 1&1/2 SHARES OF CAPITAL STOCK OF FONTANA UNION WATER COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF CALIFORNIA.

LSA

FIGURE 2

0 35 70
FEET

SOURCE: Van Dam Engineering

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Stewart Almond Warehouse Project

Conceptual Site Plan

ATTACHMENT B

CALEEMOD OUTPUT SHEETS

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

Stewart Almond Warehouse Project

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

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

1.2 Other Project Characteristics

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

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total project site is 2 acres

Construction Phase - Construction will begin in May 2023 and end in October 2023. Overlap of building construction and architectural coating

Off-road Equipment - Default

Demolition - Demolition of a 1,500 sq ft residential structure

Grading - Balanced site

Vehicle Trips - Based on a trip generation of 70 ADT

Construction Off-road Equipment Mitigation - Comply with SCAQMD Rule 403 and use of construction equipment tier 2

Area Mitigation - No hearths

Energy Mitigation - project would include skylights to reduce lighting use by half and motion sensor lighting

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

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

Water Mitigation - Project would have low flow toilets and sinks and drought tolerant landscape

Fleet Mix - Based on 4 medium trucks and 13 heavy trucks

Energy Use - No natural gas use

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

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

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	200.00	90.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	2.00	5.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24NG	1.98	0.00
tblFleetMix	HHD	0.02	0.19
tblFleetMix	LDA	0.54	0.33
tblFleetMix	MH	5.0710e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblLandUse	LandUseSquareFeet	15,681.60	15,000.00
tblLandUse	LotAcreage	0.94	1.25
tblLandUse	LotAcreage	0.49	0.39
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.71
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	1.71
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.71

2.0 Emissions Summary

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

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

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2902	0.7530	0.8259	1.6200e-003	0.0578	0.0327	0.0905	0.0226	0.0313	0.0539	0.0000	138.1528	138.1528	0.0221	1.9600e-003	139.2900
Maximum	**0.2902**	**0.7530**	**0.8259**	**1.6200e-003**	**0.0578**	**0.0327**	**0.0905**	**0.0226**	**0.0313**	**0.0539**	**0.0000**	**138.1528**	**138.1528**	**0.0221**	**1.9600e-003**	**139.2900**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2509	1.1068	0.8970	1.6200e-003	0.0390	0.0431	0.0821	0.0137	0.0431	0.0568	0.0000	138.1527	138.1527	0.0221	1.9600e-003	139.2899
Maximum	**0.2509**	**1.1068**	**0.8970**	**1.6200e-003**	**0.0390**	**0.0431**	**0.0821**	**0.0137**	**0.0431**	**0.0568**	**0.0000**	**138.1527**	**138.1527**	**0.0221**	**1.9600e-003**	**139.2899**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**13.54**	**-46.99**	**-8.61**	**0.00**	**32.45**	**-31.79**	**9.23**	**39.45**	**-37.52**	**-5.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2023	7-31-2023	0.4390	0.5874
2	8-1-2023	9-30-2023	0.4716	0.5940
		Highest	0.4716	0.5940

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1691	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	18.2347	18.2347	1.5400e-003	1.9000e-004	18.3287
Mobile	0.0439	0.2498	0.4928	1.7700e-003	0.1173	2.2900e-003	0.1196	0.0317	2.1700e-003	0.0339	0.0000	170.0045	170.0045	7.9300e-003	0.0177	175.4781
Waste						0.0000	0.0000		0.0000	0.0000	7.8294	0.0000	7.8294	0.4627	0.0000	19.3969
Water						0.0000	0.0000		0.0000	0.0000	3.0080	22.7394	25.7474	0.3109	7.5300e-003	35.7622
Total	**0.2130**	**0.2498**	**0.4940**	**1.7700e-003**	**0.1173**	**2.2900e-003**	**0.1196**	**0.0317**	**2.1700e-003**	**0.0339**	**10.8373**	**210.9809**	**221.8183**	**0.7831**	**0.0254**	**248.9685**

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1691	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	13.2983	13.2983	1.1200e-003	1.4000e-004	13.3669
Mobile	0.0439	0.2498	0.4928	1.7700e-003	0.1173	2.2900e-003	0.1196	0.0317	2.1700e-003	0.0339	0.0000	170.0045	170.0045	7.9300e-003	0.0177	175.4781
Waste						0.0000	0.0000		0.0000	0.0000	7.8294	0.0000	7.8294	0.4627	0.0000	19.3969
Water						0.0000	0.0000		0.0000	0.0000	2.6362	19.9817	22.6179	0.2725	6.6000e-003	31.3952
Total	**0.2130**	**0.2498**	**0.4940**	**1.7700e-003**	**0.1173**	**2.2900e-003**	**0.1196**	**0.0317**	**2.1700e-003**	**0.0339**	**10.4655**	**203.2868**	**213.7524**	**0.7442**	**0.0244**	**239.6396**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.43**	**3.65**	**3.64**	**4.96**	**3.86**	**3.75**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2023	5/12/2023	5	10	
2	Site Preparation	Site Preparation	5/15/2023	5/19/2023	5	5	
3	Grading	Grading	5/22/2023	5/26/2023	5	5	

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4	Building Construction	Building Construction	5/29/2023	9/29/2023	5	90	
5	Architectural Coating	Architectural Coating	8/14/2023	10/13/2023	5	45	
6	Paving	Paving	10/2/2023	10/13/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.69

Acres of Grading (Grading Phase): 5

Acres of Paving: 0.39

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42

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Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	7.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	33.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.4000e-004	0.0000	7.4000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3600e-003	0.0716	0.0673	1.2000e-004		3.3800e-003	3.3800e-003		3.1600e-003	3.1600e-003	0.0000	10.5433	10.5433	2.6700e-003	0.0000	10.6101
Total	**7.3600e-003**	**0.0716**	**0.0673**	**1.2000e-004**	**7.4000e-004**	**3.3800e-003**	**4.1200e-003**	**1.1000e-004**	**3.1600e-003**	**3.2700e-003**	**0.0000**	**10.5433**	**10.5433**	**2.6700e-003**	**0.0000**	**10.6101**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	4.1000e-004	1.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1945	0.1945	1.0000e-005	3.0000e-005	0.2039
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.7000e-004	2.1100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5566	0.5566	1.0000e-005	2.0000e-005	0.5615
Total	**2.4000e-004**	**5.8000e-004**	**2.2300e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**	**7.8000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.7511**	**0.7511**	**2.0000e-005**	**5.0000e-005**	**0.7654**

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3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.3000e-004	0.0000	3.3000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4300e-003	0.1060	0.0771	1.2000e-004		3.5900e-003	3.5900e-003		3.5900e-003	3.5900e-003	0.0000	10.5433	10.5433	2.6700e-003	0.0000	10.6101
Total	**4.4300e-003**	**0.1060**	**0.0771**	**1.2000e-004**	**3.3000e-004**	**3.5900e-003**	**3.9200e-003**	**5.0000e-005**	**3.5900e-003**	**3.6400e-003**	**0.0000**	**10.5433**	**10.5433**	**2.6700e-003**	**0.0000**	**10.6101**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	4.1000e-004	1.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1945	0.1945	1.0000e-005	3.0000e-005	0.2039
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.7000e-004	2.1100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5566	0.5566	1.0000e-005	2.0000e-005	0.5615
Total	**2.4000e-004**	**5.8000e-004**	**2.2300e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**	**7.8000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.7511**	**0.7511**	**2.0000e-005**	**5.0000e-005**	**0.7654**

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3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0157	0.0000	0.0157	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8300e-003	0.0311	0.0166	4.0000e-005		1.2700e-003	1.2700e-003		1.1700e-003	1.1700e-003	0.0000	3.7786	3.7786	1.2200e-003	0.0000	3.8091
Total	**2.8300e-003**	**0.0311**	**0.0166**	**4.0000e-005**	**0.0157**	**1.2700e-003**	**0.0169**	**7.5100e-003**	**1.1700e-003**	**8.6800e-003**	**0.0000**	**3.7786**	**3.7786**	**1.2200e-003**	**0.0000**	**3.8091**

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	7.0000e-005	5.0000e-005	6.5000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1713	0.1713	0.0000	0.0000	0.1728
Total	**7.0000e-005**	**5.0000e-005**	**6.5000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1713**	**0.1713**	**0.0000**	**0.0000**	**0.1728**

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3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.0500e-003	0.0000	7.0500e-003	3.3800e-003	0.0000	3.3800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2300e-003	0.0374	0.0246	4.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	3.7786	3.7786	1.2200e-003	0.0000	3.8091
Total	**1.2300e-003**	**0.0374**	**0.0246**	**4.0000e-005**	**7.0500e-003**	**9.4000e-004**	**7.9900e-003**	**3.3800e-003**	**9.4000e-004**	**4.3200e-003**	**0.0000**	**3.7786**	**3.7786**	**1.2200e-003**	**0.0000**	**3.8091**

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	7.0000e-005	5.0000e-005	6.5000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1713	0.1713	0.0000	0.0000	0.1728
Total	**7.0000e-005**	**5.0000e-005**	**6.5000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1713**	**0.1713**	**0.0000**	**0.0000**	**0.1728**

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3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0177	0.0000	0.0177	8.5600e-003	0.0000	8.5600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3300e-003	0.0362	0.0218	5.0000e-005		1.5100e-003	1.5100e-003		1.3900e-003	1.3900e-003	0.0000	4.5260	4.5260	1.4600e-003	0.0000	4.5626
Total	**3.3300e-003**	**0.0362**	**0.0218**	**5.0000e-005**	**0.0177**	**1.5100e-003**	**0.0192**	**8.5600e-003**	**1.3900e-003**	**9.9500e-003**	**0.0000**	**4.5260**	**4.5260**	**1.4600e-003**	**0.0000**	**4.5626**

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	9.0000e-005	7.0000e-005	8.1000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2141	0.2141	1.0000e-005	1.0000e-005	0.2160
Total	**9.0000e-005**	**7.0000e-005**	**8.1000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2141**	**0.2141**	**1.0000e-005**	**1.0000e-005**	**0.2160**

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3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.9700e-003	0.0000	7.9700e-003	3.8500e-003	0.0000	3.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5700e-003	0.0453	0.0304	5.0000e-005		1.2100e-003	1.2100e-003		1.2100e-003	1.2100e-003	0.0000	4.5260	4.5260	1.4600e-003	0.0000	4.5626
Total	**1.5700e-003**	**0.0453**	**0.0304**	**5.0000e-005**	**7.9700e-003**	**1.2100e-003**	**9.1800e-003**	**3.8500e-003**	**1.2100e-003**	**5.0600e-003**	**0.0000**	**4.5260**	**4.5260**	**1.4600e-003**	**0.0000**	**4.5626**

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	9.0000e-005	7.0000e-005	8.1000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2141	0.2141	1.0000e-005	1.0000e-005	0.2160
Total	**9.0000e-005**	**7.0000e-005**	**8.1000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2141**	**0.2141**	**1.0000e-005**	**1.0000e-005**	**0.2160**

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

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0686	0.5270	0.5675	9.9000e-004		0.0232	0.0232		0.0224	0.0224	0.0000	81.7196	81.7196	0.0139	0.0000	82.0665
Total	**0.0686**	**0.5270**	**0.5675**	**9.9000e-004**		**0.0232**	**0.0232**		**0.0224**	**0.0224**	**0.0000**	**81.7196**	**81.7196**	**0.0139**	**0.0000**	**82.0665**

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	6.6000e-004	0.0216	8.7400e-003	1.0000e-004	3.6900e-003	1.5000e-004	3.8400e-003	1.0600e-003	1.5000e-004	1.2100e-003	0.0000	10.1956	10.1956	2.7000e-004	1.5100e-003	10.6512
Worker	5.1700e-003	3.8600e-003	0.0483	1.4000e-004	0.0163	8.0000e-005	0.0164	4.3200e-003	8.0000e-005	4.4000e-003	0.0000	12.7169	12.7169	3.3000e-004	3.5000e-004	12.8281
Total	**5.8300e-003**	**0.0254**	**0.0571**	**2.4000e-004**	**0.0200**	**2.3000e-004**	**0.0202**	**5.3800e-003**	**2.3000e-004**	**5.6100e-003**	**0.0000**	**22.9125**	**22.9125**	**6.0000e-004**	**1.8600e-003**	**23.4793**

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3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0378	0.7798	0.6065	9.9000e-004		0.0329	0.0329		0.0329	0.0329	0.0000	81.7195	81.7195	0.0139	0.0000	82.0664
Total	**0.0378**	**0.7798**	**0.6065**	**9.9000e-004**		**0.0329**	**0.0329**		**0.0329**	**0.0329**	**0.0000**	**81.7195**	**81.7195**	**0.0139**	**0.0000**	**82.0664**

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	6.6000e-004	0.0216	8.7400e-003	1.0000e-004	3.6900e-003	1.5000e-004	3.8400e-003	1.0600e-003	1.5000e-004	1.2100e-003	0.0000	10.1956	10.1956	2.7000e-004	1.5100e-003	10.6512
Worker	5.1700e-003	3.8600e-003	0.0483	1.4000e-004	0.0163	8.0000e-005	0.0164	4.3200e-003	8.0000e-005	4.4000e-003	0.0000	12.7169	12.7169	3.3000e-004	3.5000e-004	12.8281
Total	**5.8300e-003**	**0.0254**	**0.0571**	**2.4000e-004**	**0.0200**	**2.3000e-004**	**0.0202**	**5.3800e-003**	**2.3000e-004**	**5.6100e-003**	**0.0000**	**22.9125**	**22.9125**	**6.0000e-004**	**1.8600e-003**	**23.4793**

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3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1931					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3100e-003	0.0293	0.0408	7.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003	0.0000	5.7448	5.7448	3.4000e-004	0.0000	5.7534
Total	**0.1974**	**0.0293**	**0.0408**	**7.0000e-005**		**1.5900e-003**	**1.5900e-003**		**1.5900e-003**	**1.5900e-003**	**0.0000**	**5.7448**	**5.7448**	**3.4000e-004**	**0.0000**	**5.7534**

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	5.5000e-004	4.1000e-004	5.1200e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3488	1.3488	4.0000e-005	4.0000e-005	1.3606
Total	**5.5000e-004**	**4.1000e-004**	**5.1200e-003**	**1.0000e-005**	**1.7300e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.3488**	**1.3488**	**4.0000e-005**	**4.0000e-005**	**1.3606**

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3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1931					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5600e-003	0.0529	0.0412	7.0000e-005		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	5.7448	5.7448	3.4000e-004	0.0000	5.7534
Total	**0.1957**	**0.0529**	**0.0412**	**7.0000e-005**		**2.1400e-003**	**2.1400e-003**		**2.1400e-003**	**2.1400e-003**	**0.0000**	**5.7448**	**5.7448**	**3.4000e-004**	**0.0000**	**5.7534**

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	5.5000e-004	4.1000e-004	5.1200e-003	1.0000e-005	1.7300e-003	1.0000e-005	1.7400e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3488	1.3488	4.0000e-005	4.0000e-005	1.3606
Total	**5.5000e-004**	**4.1000e-004**	**5.1200e-003**	**1.0000e-005**	**1.7300e-003**	**1.0000e-005**	**1.7400e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.3488**	**1.3488**	**4.0000e-005**	**4.0000e-005**	**1.3606**

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3.7 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.7300e-003**	**0.0312**	**0.0440**	**7.0000e-005**		**1.5400e-003**	**1.5400e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**5.8862**	**5.8862**	**1.8700e-003**	**0.0000**	**5.9329**

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	2.3000e-004	1.7000e-004	2.1100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5566	0.5566	1.0000e-005	2.0000e-005	0.5615
Total	**2.3000e-004**	**1.7000e-004**	**2.1100e-003**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5566**	**0.5566**	**1.0000e-005**	**2.0000e-005**	**0.5615**

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

3.7 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.7500e-003	0.0587	0.0493	7.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	5.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.2600e-003**	**0.0587**	**0.0493**	**7.0000e-005**		**2.0600e-003**	**2.0600e-003**		**2.0600e-003**	**2.0600e-003**	**0.0000**	**5.8862**	**5.8862**	**1.8700e-003**	**0.0000**	**5.9329**

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	2.3000e-004	1.7000e-004	2.1100e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5566	0.5566	1.0000e-005	2.0000e-005	0.5615
Total	**2.3000e-004**	**1.7000e-004**	**2.1100e-003**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5566**	**0.5566**	**1.0000e-005**	**2.0000e-005**	**0.5615**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0439	0.2498	0.4928	1.7700e-003	0.1173	2.2900e-003	0.1196	0.0317	2.1700e-003	0.0339	0.0000	170.0045	170.0045	7.9300e-003	0.0177	175.4781
Unmitigated	0.0439	0.2498	0.4928	1.7700e-003	0.1173	2.2900e-003	0.1196	0.0317	2.1700e-003	0.0339	0.0000	170.0045	170.0045	7.9300e-003	0.0177	175.4781

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

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

4.4 Fleet Mix

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	13.2983	13.2983	1.1200e-003	1.4000e-004	13.3669
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	18.2347	18.2347	1.5400e-003	1.9000e-004	18.3287
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

5.3 Energy by Land Use - Electricity

Unmitigated

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

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	3850	0.6828	6.0000e-005	1.0000e-005	0.6863
Unrefrigerated Warehouse-No Rail	71135	12.6155	1.0600e-003	1.3000e-004	12.6806
Total		**13.2983**	**1.1200e-003**	**1.4000e-004**	**13.3669**

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1691	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003
Unmitigated	0.1691	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0193					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1497					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003
Total	**0.1691**	**1.0000e-005**	**1.2300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.3900e-003**	**2.3900e-003**	**1.0000e-005**	**0.0000**	**2.5500e-003**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0193					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1497					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3900e-003	2.3900e-003	1.0000e-005	0.0000	2.5500e-003
Total	**0.1691**	**1.0000e-005**	**1.2300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.3900e-003**	**2.3900e-003**	**1.0000e-005**	**0.0000**	**2.5500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

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

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

7.2 Water by Land Use

Unmitigated

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

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

7.2 Water by Land Use

Mitigated

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

Category/Year

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

8.2 Waste by Land Use

Unmitigated

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

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

8.2 Waste by Land Use

Mitigated

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

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

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

11.0 Vegetation

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

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

Stewart Almond Warehouse Project

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

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

1.2 Other Project Characteristics

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

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total project site is 2 acres

Construction Phase - Construction will begin in May 2023 and end in October 2023. Overlap of building construction and architectural coating

Off-road Equipment - Default

Demolition - Demolition of a 1,500 sq ft residential structure

Grading - Balanced site

Vehicle Trips - Based on a trip generation of 70 ADT

Construction Off-road Equipment Mitigation - Comply with SCAQMD Rule 403 and use of construction equipment tier 2

Area Mitigation - No hearths

Energy Mitigation - project would include skylights to reduce lighting use by half and motion sensor lighting

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

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

Water Mitigation - Project would have low flow toilets and sinks and drought tolerant landscape

Fleet Mix - Based on 4 medium trucks and 13 heavy trucks

Energy Use - No natural gas use

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

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

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

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	200.00	90.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	2.00	5.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24NG	1.98	0.00
tblFleetMix	HHD	0.02	0.19
tblFleetMix	LDA	0.54	0.33
tblFleetMix	MH	5.0710e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblLandUse	LandUseSquareFeet	15,681.60	15,000.00
tblLandUse	LotAcreage	0.94	1.25
tblLandUse	LotAcreage	0.49	0.39
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.71
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	1.71
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.71

2.0 Emissions Summary

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

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	10.4685	14.4912	16.1220	0.0314	7.1944	0.6782	7.7993	3.4544	0.6342	4.0109	0.0000	2,941.3968	2,941.3968	0.6479	0.0465	2,964.5659
Maximum	**10.4685**	**14.4912**	**16.1220**	**0.0314**	**7.1944**	**0.6782**	**7.7993**	**3.4544**	**0.6342**	**4.0109**	**0.0000**	**2,941.3968**	**2,941.3968**	**0.6479**	**0.0465**	**2,964.5659**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	9.7070	21.3130	17.0108	0.0314	3.2989	0.8322	3.7845	1.5708	0.8319	2.0563	0.0000	2,941.3968	2,941.3968	0.6479	0.0465	2,964.5659
Maximum	**9.7070**	**21.3130**	**17.0108**	**0.0314**	**3.2989**	**0.8322**	**3.7845**	**1.5708**	**0.8319**	**2.0563**	**0.0000**	**2,941.3968**	**2,941.3968**	**0.6479**	**0.0465**	**2,964.5659**

	ROG	NOx	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	**7.27**	**-47.08**	**-5.51**	**0.00**	**54.15**	**-22.72**	**51.48**	**54.53**	**-31.17**	**48.73**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.2699	1.2920	2.8935	0.0101	0.6563	0.0126	0.6689	0.1770	0.0119	0.1890		1,060.7463	1,060.7463	0.0473	0.1062	1,093.5791
Total	**1.1970**	**1.2921**	**2.9034**	**0.0101**	**0.6563**	**0.0126**	**0.6689**	**0.1770**	**0.0120**	**0.1890**		**1,060.7674**	**1,060.7674**	**0.0474**	**0.1062**	**1,093.6016**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.2699	1.2920	2.8935	0.0101	0.6563	0.0126	0.6689	0.1770	0.0119	0.1890		1,060.7463	1,060.7463	0.0473	0.1062	1,093.5791
Total	**1.1970**	**1.2921**	**2.9034**	**0.0101**	**0.6563**	**0.0126**	**0.6689**	**0.1770**	**0.0120**	**0.1890**		**1,060.7674**	**1,060.7674**	**0.0474**	**0.1062**	**1,093.6016**

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

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

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

3.0 Construction Detail

Construction Phase

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

Acres of Grading (Site Preparation Phase): 4.69

Acres of Grading (Grading Phase): 5

Acres of Paving: 0.39

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

OffRoad Equipment

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

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

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

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	7.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	33.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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

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

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1477	0.0000	0.1477	0.0224	0.0000	0.0224			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**0.1477**	**0.6766**	**0.8243**	**0.0224**	**0.6328**	**0.6551**		**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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

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

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6900e-003	0.0770	0.0235	3.9000e-004	0.0123	8.1000e-004	0.0131	3.3600e-003	7.7000e-004	4.1400e-003		42.8520	42.8520	1.8300e-003	6.7900e-003	44.9218
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0508	0.0307	0.4902	1.3000e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		132.8169	132.8169	3.1700e-003	3.1200e-003	133.8269
Total	**0.0525**	**0.1077**	**0.5137**	**1.6900e-003**	**0.1576**	**1.5300e-003**	**0.1591**	**0.0419**	**1.4300e-003**	**0.0433**		**175.6689**	**175.6689**	**5.0000e-003**	**9.9100e-003**	**178.7488**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0664	0.0000	0.0664	0.0101	0.0000	0.0101			0.0000			0.0000
Off-Road	0.8857	21.2053	15.4154	0.0241		0.7182	0.7182		0.7182	0.7182	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**0.8857**	**21.2053**	**15.4154**	**0.0241**	**0.0664**	**0.7182**	**0.7846**	**0.0101**	**0.7182**	**0.7282**	**0.0000**	**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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

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

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6900e-003	0.0770	0.0235	3.9000e-004	0.0123	8.1000e-004	0.0131	3.3600e-003	7.7000e-004	4.1400e-003		42.8520	42.8520	1.8300e-003	6.7900e-003	44.9218
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0508	0.0307	0.4902	1.3000e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		132.8169	132.8169	3.1700e-003	3.1200e-003	133.8269
Total	**0.0525**	**0.1077**	**0.5137**	**1.6900e-003**	**0.1576**	**1.5300e-003**	**0.1591**	**0.0419**	**1.4300e-003**	**0.0433**		**175.6689**	**175.6689**	**5.0000e-003**	**9.9100e-003**	**178.7488**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2641	0.0000	6.2641	3.0039	0.0000	3.0039			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**6.2641**	**0.5074**	**6.7715**	**3.0039**	**0.4668**	**3.4707**		**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

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

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

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0313	0.0189	0.3017	8.0000e-004	0.0894	4.4000e-004	0.0899	0.0237	4.1000e-004	0.0241		81.7335	81.7335	1.9500e-003	1.9200e-003	82.3550
Total	**0.0313**	**0.0189**	**0.3017**	**8.0000e-004**	**0.0894**	**4.4000e-004**	**0.0899**	**0.0237**	**4.1000e-004**	**0.0241**		**81.7335**	**81.7335**	**1.9500e-003**	**1.9200e-003**	**82.3550**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8188	0.0000	2.8188	1.3517	0.0000	1.3517			0.0000			0.0000
Off-Road	0.4908	14.9460	9.8221	0.0172		0.3747	0.3747		0.3747	0.3747	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**0.4908**	**14.9460**	**9.8221**	**0.0172**	**2.8188**	**0.3747**	**3.1935**	**1.3517**	**0.3747**	**1.7265**	**0.0000**	**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

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

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

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0313	0.0189	0.3017	8.0000e-004	0.0894	4.4000e-004	0.0899	0.0237	4.1000e-004	0.0241		81.7335	81.7335	1.9500e-003	1.9200e-003	82.3550
Total	**0.0313**	**0.0189**	**0.3017**	**8.0000e-004**	**0.0894**	**4.4000e-004**	**0.0899**	**0.0237**	**4.1000e-004**	**0.0241**		**81.7335**	**81.7335**	**1.9500e-003**	**1.9200e-003**	**82.3550**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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

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

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0391	0.0236	0.3771	1.0000e-003	0.1118	5.5000e-004	0.1123	0.0296	5.1000e-004	0.0302		102.1669	102.1669	2.4400e-003	2.4000e-003	102.9438
Total	**0.0391**	**0.0236**	**0.3771**	**1.0000e-003**	**0.1118**	**5.5000e-004**	**0.1123**	**0.0296**	**5.1000e-004**	**0.0302**		**102.1669**	**102.1669**	**2.4400e-003**	**2.4000e-003**	**102.9438**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	0.6262	18.1050	12.1450	0.0206		0.4850	0.4850		0.4850	0.4850	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**0.6262**	**18.1050**	**12.1450**	**0.0206**	**3.1872**	**0.4850**	**3.6722**	**1.5411**	**0.4850**	**2.0262**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0391	0.0236	0.3771	1.0000e-003	0.1118	5.5000e-004	0.1123	0.0296	5.1000e-004	0.0302		102.1669	102.1669	2.4400e-003	2.4000e-003	102.9438
Total	**0.0391**	**0.0236**	**0.3771**	**1.0000e-003**	**0.1118**	**5.5000e-004**	**0.1123**	**0.0296**	**5.1000e-004**	**0.0302**		**102.1669**	**102.1669**	**2.4400e-003**	**2.4000e-003**	**102.9438**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

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

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

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0152	0.4560	0.1913	2.3300e-003	0.0833	3.4300e-003	0.0867	0.0240	3.2800e-003	0.0273		249.4936	249.4936	6.5200e-003	0.0368	260.6360
Worker	0.1290	0.0779	1.2445	3.2900e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		337.1506	337.1506	8.0500e-003	7.9300e-003	339.7145
Total	**0.1443**	**0.5338**	**1.4358**	**5.6200e-003**	**0.4522**	**5.2500e-003**	**0.4574**	**0.1218**	**4.9600e-003**	**0.1268**		**586.6443**	**586.6443**	**0.0146**	**0.0448**	**600.3505**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8395	17.3294	13.4786	0.0221		0.7315	0.7315		0.7315	0.7315	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**0.8395**	**17.3294**	**13.4786**	**0.0221**		**0.7315**	**0.7315**		**0.7315**	**0.7315**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

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

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

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0152	0.4560	0.1913	2.3300e-003	0.0833	3.4300e-003	0.0867	0.0240	3.2800e-003	0.0273		249.4936	249.4936	6.5200e-003	0.0368	260.6360
Worker	0.1290	0.0779	1.2445	3.2900e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		337.1506	337.1506	8.0500e-003	7.9300e-003	339.7145
Total	**0.1443**	**0.5338**	**1.4358**	**5.6200e-003**	**0.4522**	**5.2500e-003**	**0.4574**	**0.1218**	**4.9600e-003**	**0.1268**		**586.6443**	**586.6443**	**0.0146**	**0.0448**	**600.3505**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.5820					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**8.7736**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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

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

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0274	0.0165	0.2640	7.0000e-004	0.0782	3.9000e-004	0.0786	0.0208	3.6000e-004	0.0211		71.5168	71.5168	1.7100e-003	1.6800e-003	72.0607
Total	**0.0274**	**0.0165**	**0.2640**	**7.0000e-004**	**0.0782**	**3.9000e-004**	**0.0786**	**0.0208**	**3.6000e-004**	**0.0211**		**71.5168**	**71.5168**	**1.7100e-003**	**1.6800e-003**	**72.0607**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.5820					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**8.6959**	**2.3524**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0274	0.0165	0.2640	7.0000e-004	0.0782	3.9000e-004	0.0786	0.0208	3.6000e-004	0.0211		71.5168	71.5168	1.7100e-003	1.6800e-003	72.0607
Total	**0.0274**	**0.0165**	**0.2640**	**7.0000e-004**	**0.0782**	**3.9000e-004**	**0.0786**	**0.0208**	**3.6000e-004**	**0.0211**		**71.5168**	**71.5168**	**1.7100e-003**	**1.6800e-003**	**72.0607**

3.7 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7468**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**		**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

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

3.7 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0508	0.0307	0.4902	1.3000e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		132.8169	132.8169	3.1700e-003	3.1200e-003	133.8269
Total	**0.0508**	**0.0307**	**0.4902**	**1.3000e-003**	**0.1453**	**7.2000e-004**	**0.1460**	**0.0385**	**6.6000e-004**	**0.0392**		**132.8169**	**132.8169**	**3.1700e-003**	**3.1200e-003**	**133.8269**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5500	11.7418	9.8512	0.0136		0.4113	0.4113		0.4113	0.4113	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6521**	**11.7418**	**9.8512**	**0.0136**		**0.4113**	**0.4113**		**0.4113**	**0.4113**	**0.0000**	**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

3.7 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0508	0.0307	0.4902	1.3000e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		132.8169	132.8169	3.1700e-003	3.1200e-003	133.8269
Total	**0.0508**	**0.0307**	**0.4902**	**1.3000e-003**	**0.1453**	**7.2000e-004**	**0.1460**	**0.0385**	**6.6000e-004**	**0.0392**		**132.8169**	**132.8169**	**3.1700e-003**	**3.1200e-003**	**133.8269**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2699	1.2920	2.8935	0.0101	0.6563	0.0126	0.6689	0.1770	0.0119	0.1890		1,060.7463	1,060.7463	0.0473	0.1062	1,093.5791
Unmitigated	0.2699	1.2920	2.8935	0.0101	0.6563	0.0126	0.6689	0.1770	0.0119	0.1890		1,060.7463	1,060.7463	0.0473	0.1062	1,093.5791

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

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

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

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

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

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

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

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

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Unmitigated	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8204					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Total	**0.9271**	**9.0000e-005**	**9.8400e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0211**	**0.0211**	**6.0000e-005**		**0.0225**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8204					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Total	**0.9271**	**9.0000e-005**	**9.8400e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0211**	**0.0211**	**6.0000e-005**		**0.0225**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

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

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

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

Stewart Almond Warehouse Project

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

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

1.2 Other Project Characteristics

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

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total project site is 2 acres

Construction Phase - Construction will begin in May 2023 and end in October 2023. Overlap of building construction and architectural coating

Off-road Equipment - Default

Demolition - Demolition of a 1,500 sq ft residential structure

Grading - Balanced site

Vehicle Trips - Based on a trip generation of 70 ADT

Construction Off-road Equipment Mitigation - Comply with SCAQMD Rule 403 and use of construction equipment tier 2

Area Mitigation - No hearths

Energy Mitigation - project would include skylights to reduce lighting use by half and motion sensor lighting

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

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

Water Mitigation - Project would have low flow toilets and sinks and drought tolerant landscape

Fleet Mix - Based on 4 medium trucks and 13 heavy trucks

Energy Use - No natural gas use

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

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

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

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	200.00	90.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	2.00	5.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24NG	1.98	0.00
tblFleetMix	HHD	0.02	0.19
tblFleetMix	LDA	0.54	0.33
tblFleetMix	MH	5.0710e-003	0.00
tblFleetMix	MHD	0.01	0.06
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblLandUse	LandUseSquareFeet	15,681.60	15,000.00
tblLandUse	LotAcreage	0.94	1.25
tblLandUse	LotAcreage	0.49	0.39
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	1.71
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	1.71
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	1.71

2.0 Emissions Summary

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

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	10.4617	14.4924	15.8610	0.0310	7.1944	0.6782	7.7993	3.4544	0.6342	4.0109	0.0000	2,903.5767	2,903.5767	0.6479	0.0469	2,926.8710
Maximum	**10.4617**	**14.4924**	**15.8610**	**0.0310**	**7.1944**	**0.6782**	**7.7993**	**3.4544**	**0.6342**	**4.0109**	**0.0000**	**2,903.5767**	**2,903.5767**	**0.6479**	**0.0469**	**2,926.8710**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	9.7002	21.3187	16.7498	0.0310	3.2989	0.8322	3.7845	1.5708	0.8319	2.0563	0.0000	2,903.5767	2,903.5767	0.6479	0.0469	2,926.8710
Maximum	**9.7002**	**21.3187**	**16.7498**	**0.0310**	**3.2989**	**0.8322**	**3.7845**	**1.5708**	**0.8319**	**2.0563**	**0.0000**	**2,903.5767**	**2,903.5767**	**0.6479**	**0.0469**	**2,926.8710**

	ROG	NOx	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	**7.28**	**-47.10**	**-5.60**	**0.00**	**54.15**	**-22.72**	**51.48**	**54.53**	**-31.17**	**48.73**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.2406	1.3671	2.6144	9.7000e-003	0.6563	0.0126	0.6689	0.1770	0.0120	0.1890		1,024.3182	1,024.3182	0.0476	0.1070	1,057.4058
Total	**1.1677**	**1.3672**	**2.6243**	**9.7000e-003**	**0.6563**	**0.0126**	**0.6689**	**0.1770**	**0.0120**	**0.1890**		**1,024.3393**	**1,024.3393**	**0.0477**	**0.1070**	**1,057.4282**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.2406	1.3671	2.6144	9.7000e-003	0.6563	0.0126	0.6689	0.1770	0.0120	0.1890		1,024.3182	1,024.3182	0.0476	0.1070	1,057.4058
Total	**1.1677**	**1.3672**	**2.6243**	**9.7000e-003**	**0.6563**	**0.0126**	**0.6689**	**0.1770**	**0.0120**	**0.1890**		**1,024.3393**	**1,024.3393**	**0.0477**	**0.1070**	**1,057.4282**

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

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

3.0 Construction Detail

Construction Phase

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

Acres of Grading (Site Preparation Phase): 4.69

Acres of Grading (Grading Phase): 5

Acres of Paving: 0.39

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

OffRoad Equipment

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

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

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	7.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	33.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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

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

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1477	0.0000	0.1477	0.0224	0.0000	0.0224			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**1.4725**	**14.3184**	**13.4577**	**0.0241**	**0.1477**	**0.6766**	**0.8243**	**0.0224**	**0.6328**	**0.6551**		**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5600e-003	0.0812	0.0239	3.9000e-004	0.0123	8.1000e-004	0.0131	3.3600e-003	7.8000e-004	4.1400e-003		42.9167	42.9167	1.8200e-003	6.8000e-003	44.9894
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0490	0.0323	0.4035	1.1800e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		120.3288	120.3288	3.1800e-003	3.2200e-003	121.3688
Total	**0.0505**	**0.1134**	**0.4274**	**1.5700e-003**	**0.1576**	**1.5300e-003**	**0.1591**	**0.0419**	**1.4400e-003**	**0.0433**		**163.2454**	**163.2454**	**5.0000e-003**	**0.0100**	**166.3582**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0664	0.0000	0.0664	0.0101	0.0000	0.0101			0.0000			0.0000
Off-Road	0.8857	21.2053	15.4154	0.0241		0.7182	0.7182		0.7182	0.7182	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	**0.8857**	**21.2053**	**15.4154**	**0.0241**	**0.0664**	**0.7182**	**0.7846**	**0.0101**	**0.7182**	**0.7282**	**0.0000**	**2,324.3959**	**2,324.3959**	**0.5893**		**2,339.1278**

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

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5600e-003	0.0812	0.0239	3.9000e-004	0.0123	8.1000e-004	0.0131	3.3600e-003	7.8000e-004	4.1400e-003		42.9167	42.9167	1.8200e-003	6.8000e-003	44.9894
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0490	0.0323	0.4035	1.1800e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		120.3288	120.3288	3.1800e-003	3.2200e-003	121.3688
Total	**0.0505**	**0.1134**	**0.4274**	**1.5700e-003**	**0.1576**	**1.5300e-003**	**0.1591**	**0.0419**	**1.4400e-003**	**0.0433**		**163.2454**	**163.2454**	**5.0000e-003**	**0.0100**	**166.3582**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2641	0.0000	6.2641	3.0039	0.0000	3.0039			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**6.2641**	**0.5074**	**6.7715**	**3.0039**	**0.4668**	**3.4707**		**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

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

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

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0301	0.0199	0.2483	7.2000e-004	0.0894	4.4000e-004	0.0899	0.0237	4.1000e-004	0.0241		74.0485	74.0485	1.9500e-003	1.9800e-003	74.6885
Total	**0.0301**	**0.0199**	**0.2483**	**7.2000e-004**	**0.0894**	**4.4000e-004**	**0.0899**	**0.0237**	**4.1000e-004**	**0.0241**		**74.0485**	**74.0485**	**1.9500e-003**	**1.9800e-003**	**74.6885**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8188	0.0000	2.8188	1.3517	0.0000	1.3517			0.0000			0.0000
Off-Road	0.4908	14.9460	9.8221	0.0172		0.3747	0.3747		0.3747	0.3747	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**0.4908**	**14.9460**	**9.8221**	**0.0172**	**2.8188**	**0.3747**	**3.1935**	**1.3517**	**0.3747**	**1.7265**	**0.0000**	**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

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

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

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0301	0.0199	0.2483	7.2000e-004	0.0894	4.4000e-004	0.0899	0.0237	4.1000e-004	0.0241		74.0485	74.0485	1.9500e-003	1.9800e-003	74.6885
Total	**0.0301**	**0.0199**	**0.2483**	**7.2000e-004**	**0.0894**	**4.4000e-004**	**0.0899**	**0.0237**	**4.1000e-004**	**0.0241**		**74.0485**	**74.0485**	**1.9500e-003**	**1.9800e-003**	**74.6885**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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

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

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0377	0.0248	0.3104	9.0000e-004	0.1118	5.5000e-004	0.1123	0.0296	5.1000e-004	0.0302		92.5606	92.5606	2.4400e-003	2.4800e-003	93.3606
Total	**0.0377**	**0.0248**	**0.3104**	**9.0000e-004**	**0.1118**	**5.5000e-004**	**0.1123**	**0.0296**	**5.1000e-004**	**0.0302**		**92.5606**	**92.5606**	**2.4400e-003**	**2.4800e-003**	**93.3606**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	0.6262	18.1050	12.1450	0.0206		0.4850	0.4850		0.4850	0.4850	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**0.6262**	**18.1050**	**12.1450**	**0.0206**	**3.1872**	**0.4850**	**3.6722**	**1.5411**	**0.4850**	**2.0262**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

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

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0377	0.0248	0.3104	9.0000e-004	0.1118	5.5000e-004	0.1123	0.0296	5.1000e-004	0.0302		92.5606	92.5606	2.4400e-003	2.4800e-003	93.3606
Total	**0.0377**	**0.0248**	**0.3104**	**9.0000e-004**	**0.1118**	**5.5000e-004**	**0.1123**	**0.0296**	**5.1000e-004**	**0.0302**		**92.5606**	**92.5606**	**2.4400e-003**	**2.4800e-003**	**93.3606**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

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

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

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0142	0.4816	0.1972	2.3300e-003	0.0833	3.4400e-003	0.0867	0.0240	3.2900e-003	0.0273		250.0987	250.0987	6.4700e-003	0.0370	261.2738
Worker	0.1243	0.0819	1.0243	2.9800e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		305.4499	305.4499	8.0600e-003	8.1800e-003	308.0900
Total	**0.1385**	**0.5635**	**1.2215**	**5.3100e-003**	**0.4522**	**5.2600e-003**	**0.4574**	**0.1218**	**4.9700e-003**	**0.1268**		**555.5486**	**555.5486**	**0.0145**	**0.0451**	**569.3638**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8395	17.3294	13.4786	0.0221		0.7315	0.7315		0.7315	0.7315	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**0.8395**	**17.3294**	**13.4786**	**0.0221**		**0.7315**	**0.7315**		**0.7315**	**0.7315**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

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

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

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0142	0.4816	0.1972	2.3300e-003	0.0833	3.4400e-003	0.0867	0.0240	3.2900e-003	0.0273		250.0987	250.0987	6.4700e-003	0.0370	261.2738
Worker	0.1243	0.0819	1.0243	2.9800e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		305.4499	305.4499	8.0600e-003	8.1800e-003	308.0900
Total	**0.1385**	**0.5635**	**1.2215**	**5.3100e-003**	**0.4522**	**5.2600e-003**	**0.4574**	**0.1218**	**4.9700e-003**	**0.1268**		**555.5486**	**555.5486**	**0.0145**	**0.0451**	**569.3638**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.5820					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**8.7736**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0264	0.0174	0.2173	6.3000e-004	0.0782	3.9000e-004	0.0786	0.0208	3.6000e-004	0.0211		64.7924	64.7924	1.7100e-003	1.7400e-003	65.3524
Total	**0.0264**	**0.0174**	**0.2173**	**6.3000e-004**	**0.0782**	**3.9000e-004**	**0.0786**	**0.0208**	**3.6000e-004**	**0.0211**		**64.7924**	**64.7924**	**1.7100e-003**	**1.7400e-003**	**65.3524**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.5820					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**8.6959**	**2.3524**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0264	0.0174	0.2173	6.3000e-004	0.0782	3.9000e-004	0.0786	0.0208	3.6000e-004	0.0211		64.7924	64.7924	1.7100e-003	1.7400e-003	65.3524
Total	**0.0264**	**0.0174**	**0.2173**	**6.3000e-004**	**0.0782**	**3.9000e-004**	**0.0786**	**0.0208**	**3.6000e-004**	**0.0211**		**64.7924**	**64.7924**	**1.7100e-003**	**1.7400e-003**	**65.3524**

3.7 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7468**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**		**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

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

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

3.7 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0490	0.0323	0.4035	1.1800e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		120.3288	120.3288	3.1800e-003	3.2200e-003	121.3688
Total	**0.0490**	**0.0323**	**0.4035**	**1.1800e-003**	**0.1453**	**7.2000e-004**	**0.1460**	**0.0385**	**6.6000e-004**	**0.0392**		**120.3288**	**120.3288**	**3.1800e-003**	**3.2200e-003**	**121.3688**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5500	11.7418	9.8512	0.0136		0.4113	0.4113		0.4113	0.4113	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6521**	**11.7418**	**9.8512**	**0.0136**		**0.4113**	**0.4113**		**0.4113**	**0.4113**	**0.0000**	**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

3.7 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0490	0.0323	0.4035	1.1800e-003	0.1453	7.2000e-004	0.1460	0.0385	6.6000e-004	0.0392		120.3288	120.3288	3.1800e-003	3.2200e-003	121.3688
Total	**0.0490**	**0.0323**	**0.4035**	**1.1800e-003**	**0.1453**	**7.2000e-004**	**0.1460**	**0.0385**	**6.6000e-004**	**0.0392**		**120.3288**	**120.3288**	**3.1800e-003**	**3.2200e-003**	**121.3688**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2406	1.3671	2.6144	9.7000e-003	0.6563	0.0126	0.6689	0.1770	0.0120	0.1890		1,024.3182	1,024.3182	0.0476	0.1070	1,057.4058
Unmitigated	0.2406	1.3671	2.6144	9.7000e-003	0.6563	0.0126	0.6689	0.1770	0.0120	0.1890		1,024.3182	1,024.3182	0.0476	0.1070	1,057.4058

4.2 Trip Summary Information

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

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

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

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

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

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

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

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

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

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

5.2 Energy by Land Use - NaturalGas

Mitigated

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

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

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

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Unmitigated	0.9271	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8204					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Total	**0.9271**	**9.0000e-005**	**9.8400e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0211**	**0.0211**	**6.0000e-005**		**0.0225**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8204					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-004	9.0000e-005	9.8400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0211	0.0211	6.0000e-005		0.0225
Total	**0.9271**	**9.0000e-005**	**9.8400e-003**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0211**	**0.0211**	**6.0000e-005**		**0.0225**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

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

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

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