AIR QUALITY AND GREENHOUSE GAS EMISSIONS AND ENERGY REPORT

LATIGO HILLCREST PROJECT

Thousand Oaks, California

Prepared for:

CITY OF THOUSAND OAKS
Community Development Department, Planning Division
2100 Thousand Oaks Boulevard
Thousand Oaks, California 91362
Attn: Justine Kendall, AICP, Associate Planner

Prepared by:

ENVICOM CORPORATION
4165 E. Thousand Oaks Blvd., Suite 290
Westlake Village, CA 91362
Attn: Charles Cohn, Senior Project Manager
(818) 879-4700

April 2023

SECTION

TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

This Air Quality and Greenhouse Gas Emissions Report ("report") analyzes the potential air quality and greenhouse gas (GHG) emissions impacts of the proposed Latigo Hillcrest Mixed-Use ("project") in the City of Thousand Oaks ("City"). The purpose of this analysis is to identify, describe, and evaluate the potential for significant environmental impacts to result from emissions of air pollutants during construction and operation of the project, pursuant to the California Environmental Quality Act (CEQA). The project proposes to redevelop an infill site of approximately 8.28 gross-acres ("acres" hereafter), which is currently occupied by an unused office building situated in the western portion of the City of Thousand Oaks, California, at 2150 West Hillcrest Drive. The project would consist of the removal of the existing structure, parking lots and landscaping, and the construction and operation of a mixed-use development with multi-family residential and commercial uses, as well as associated amenities and parking facilities.

2.0 PROJECT SETTING

The City is located within Ventura County and the South Central Coast Air Basin (SCCAB or "Basin") and is within the jurisdictional boundaries of the Ventura County Air Pollution Control District (VCAPCD). The proposed project site is located at 2150 West Hillcrest Drive, which is generally situated near the southeast corner of the intersection of Hillcrest Drive and Rancho Conejo Boulevard, as shown in **Figure 1, Regional Location**, and **Figure 2, Vicinity Map**. Existing land uses adjacent to the site include gas stations/mini markets and a building materials commercial use to the west, industrial/business park uses to the north, an apartment complex to the east, and the 101 Freeway to the south.

The project site is an approximately 8.28-acre infill property currently developed with an office structure and a paved parking lot that surrounds the existing structure and covers the majority of the site. Remnant landscaping is located around the existing structure, in parking lot planters, and along the perimeter of the site. The existing structure is not currently in use and has been vacant since 2021. This evaluation will not consider emissions associated with any previous use of the existing structure and will be based on an assumed baseline of zero existing operational emissions.

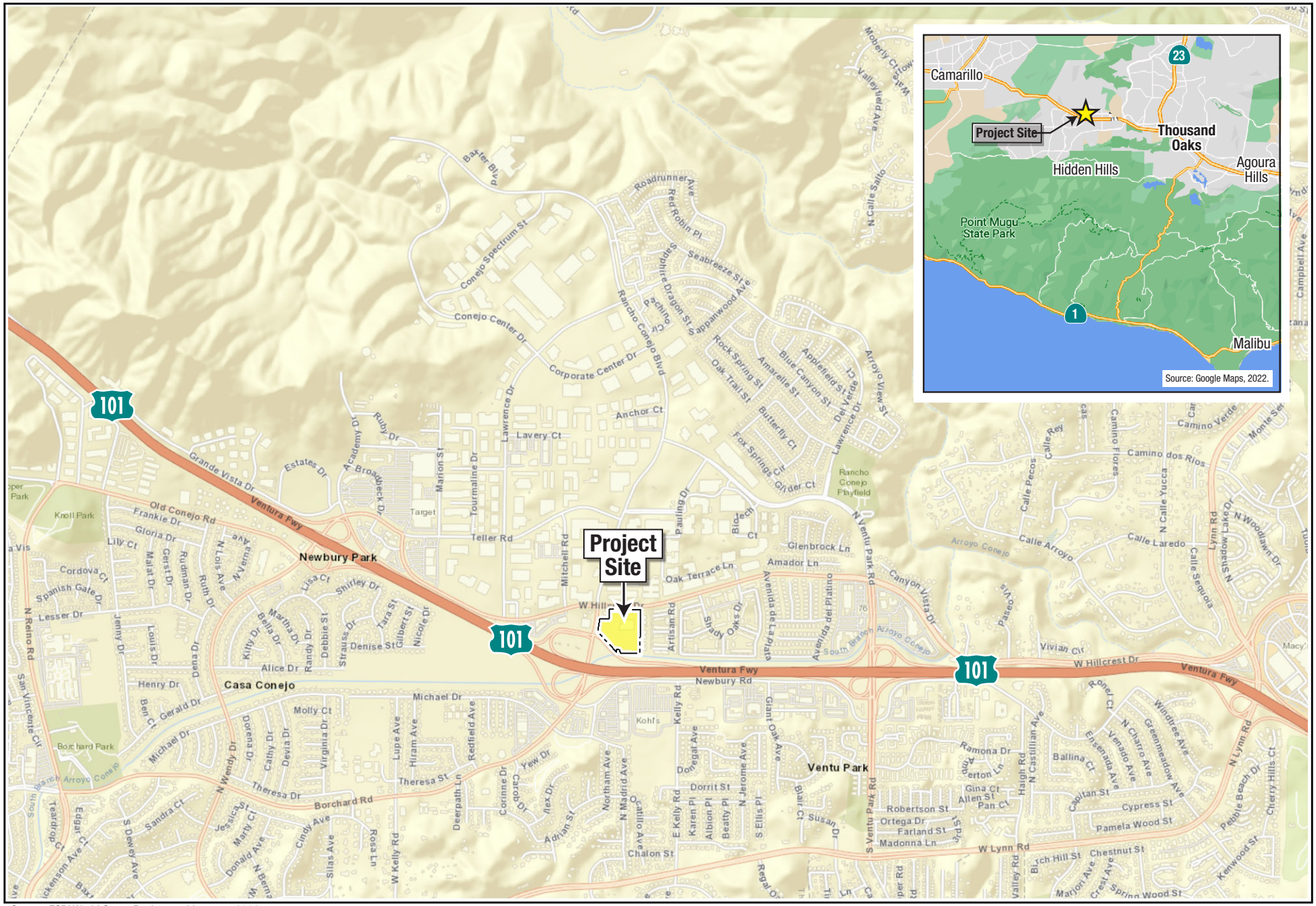
3.0 AIR QUALITY SETTING

Air Pollutants

The criteria pollutants for which federal and State standards have been promulgated and that are most relevant to air quality planning and regulation in the Basin are ozone, and fine suspended particulate matter. These and other common air pollutants are briefly described below.

- Ozone (O_3) is a gas that is typically formed in the atmosphere when volatile organic compounds (VOCs)[1] and nitrogen oxides (NO_X) undergo slow photochemical reactions in the presence of sunlight. As such, emissions of VOCs and NO_X are considered to be O_3 precursors. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant. Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the subgroups most susceptible to O_3 effects. Short-term exposures (lasting for a few hours) to O_3 at levels typically observed in southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

[1] The Ventura County Air Pollution Control District Ventura County Air Quality Assessment Guidelines specifies that within that document, VOC is synonymous with reactive organic gases (ROG) and reactive organic compounds (ROC).



Source: ESRI World Street Background Imagery, 2022.

envicom

Regional Location

FEET 0 100 200

FIGURE 1

Source: Google Earth Pro, Mar. 8, 2020.

envicom

Vicinity Map

FEET 0 125 250

FIGURE 2

- Particulate Matter PM-10 and PM-2.5 consists of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively, that can lodge in the lungs when inhaled. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities. Inhaled particulate matter can contribute to respiratory problems and can cause permanent lung damage. Inhalable particulates can also have a damaging effect on health by interfering with the body's mechanism for clearing the respiratory tract or by acting as a carrier of an absorbed toxic substance.
- Carbon Monoxide (CO) is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during the winter morning, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike sunlight. As such, emissions of VOCs and NO_X are considered to be O_3 precursors. O_3, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. CO is a health concern because it competes with oxygen, often replacing it in the blood and reducing the blood's ability to transport oxygen to vital organs. Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses, and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.
- Nitrogen dioxide (NO_2) is a compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point sources, especially power plants. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts quickly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X, a major contributor to O_3 formation. NO_2 also contributes to the formation of PM-10. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase of bronchitis in children (2-3 years old) has been observed at concentrations below 0.3 parts per million (ppm).
- Lead (Pb) in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturers of batteries, paint, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the inventory of airborne lead by nearly 95 percent. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities have become emission sources of greater concern. Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.
- Toxic Air Contaminants (TAC) are airborne pollutants that may increase a person's risk of developing cancer or other serious health effects. TACs include over 700 chemical compounds that are identified by State and federal agencies based on a review of available scientific evidence. In California, TACs are identified through a two-step process established in 1983 that includes risk identification and risk management.

Table 1, Criteria Pollutant Sources and Health Effects provides a summary of these major criteria pollutants of concern and their effects on public health.

Table 1
Criteria Pollutant Sources and Health Effects

Pollutants	Sources	Primary Health Effects
Ozone (O_3)	• Motor vehicles • Industrial emissions • Consumer products Note: These sources emit NOx and VOC which are precursors for the formation of O_3 in the atmosphere when they react with sunlight.	• Respiratory symptoms • Worsening of lung disease leading to premature death • Damage to lung tissue
Particulate Matter (PM-10)	• Cars and trucks (especially diesels) • Fireplaces, woodstoves • Windblown dust from roadways, agriculture and construction	• Premature death & hospitalization, primarily for worsening of respiratory disease
Particulate Matter (PM-2.5)	• Cars and trucks (especially diesels) • Fireplaces, woodstoves • Windblown dust from roadways, agriculture and construction	• Premature death • Hospitalization for worsening of cardiovascular disease • Hospitalization for respiratory disease • Asthma-related emergency room visits, increased symptoms, increased inhaler usage
Carbon Monoxide (CO)	• Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves	• Chest pain in patients with heart disease • Headache • Light-headedness • Reduced mental alertness
Nitrogen Dioxide (NO_2)	• See carbon monoxide sources	• Lung irritation • Enhanced allergic responses
Sources: California Air Resources Board (CARB). Sources of Air Pollution, https://ww2.arb.ca.gov/resources/sources-air-pollution, and Common Air Pollutants https://ww2.arb.ca.gov/resources/common-air-pollutants.		

Ambient Air Quality Standards

National and State ambient air quality standards (AAQS),[2] shown in **Table 2, Ambient Air Quality Standards**, are the air quality levels that are considered safe, with an adequate margin of safety, to protect the public health and welfare of "sensitive receptors," which include the elderly, young children, the acutely and chronically ill (e.g., those with cardio-respiratory disease, including asthma), and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone, the primary ingredient in photochemical smog, may lead to adverse respiratory health, even at concentrations close to the ambient standard.

[2] California Air Resources Board. California and National Ambient Air Quality Standards. Available at: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf?_ga=2.111850244.1417595818.1550763932-1724706578.1550763932.

Table 2
Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	**Averaging Time**	**California Standards** [1]		**National Standards** [2]		
		Concentration [3]	**Method** [4]	**Primary** [3,5]	**Secondary** [3,6]	**Method** [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (5/4/16)**

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (5/4/16)**

Baseline Air Quality

Recent ambient air quality measurements of criteria pollutants recorded at monitoring stations in the vicinity are shown in **Table 3, Project Area Air Quality Monitoring Summary**. Ozone and PM-2.5

measurements from a monitoring station located at 2323 Moorpark Road, Thousand Oaks, approximately 3.5 miles northeast of the project site, are provided in Table 3. The NOx and PM-10 measurements shown in Table 3 were taken at 5400 Cochran Street, Simi Valley, California, approximately 15 miles northeast of the project site, as these criteria pollutants are not recorded at the Thousand Oaks monitoring station location.

Table 3
Project Area Air Quality Monitoring Summary

Pollutant/Standard	2018	2019	2020	2021
Ozone (O_3)				
Number of Days Standards Exceeded				
1-Hour > 0.09 ppm (S)	0	0	1	0
8-Hour > 0.07 ppm (F)	1	1	7	1
Maximum Observed Concentration				
Max. 1-Hour Conc. (ppm)	0.080	0.082	0.097	0.077
Max. 8-Hour Avg. (ppm)	0.073	0.074	0.084	0.073
Nitrogen Dioxide (NOx)				
Number of Days Standards Exceeded				
1-Hour > 0.18 ppm (S)	0	0	0	0
Maximum Observed Concentration				
Max. 1-Hour Conc. (ppm)	0.0430	0.0450	0.0420	35.0
Inhalable Particulates (PM-10)				
Number of Days Standards Exceeded				
24-Hour > 50 $\mu g/m^3$ (S)	6	4	--	3
24-Hour > 150 $\mu g/m^3$ (F)	0	0	0	0
Maximum Observed Concentration				
Max. 24-Hr. Conc. ($\mu g/m^3$)	110.5	127.9	90.5	103.7
Ultra-Fine Particulates (PM-2.5)				
24-Hour > 35 $\mu g/m^3$ (F)	1	0	1	0
Max. 24-Hr. Conc. ($\mu g/m^3$)	41.5	24.5	36.3	29.1

Source: California Air Resources Board, iADAM: Air Quality Data Statistics, Accessed at https://www.arb.ca.gov/adam/index.html
Notes: S = State; F = federal; $\mu g/m^3$ = micrograms per cubic meter of air; -- = insufficient data reported

Based on the data documented in Table 3, the air quality data and trends in the project vicinity are summarized below:

1. O_3 levels exceeded 1-hour federal or State standards on one day (in 2020), from 2018-2021, and exceeded 8-hour federal standards on 10 days from 2018-2021.
2. PM-10 levels exceeded the State 24-hour standard on 13 days in 2018-2021 (insufficient data was reported for 2020). The National 24-hour PM-10 standard was not exceeded from 2018-2021.
3. PM-2.5 levels exceeded federal 24-hour standards on two days from 2018-2021.
4. NOx levels measured from 2018-2021 did not exceed National or State standards.

Regulatory Setting

Federal

Clean Air Act (CAA)

The U.S. Environmental Protection Agency (EPA) is responsible for enforcing the federal CAA, which regulates air quality in the United States. EPA is also responsible for establishing the National Ambient Air Quality Standards (NAAQS) as required under the CAA for seven criteria pollutants: CO, NO_2, O_3, PM-2.5, PM-10, SO_2, and Pb. The EPA establishes vehicle emission standards for vehicles sold in states other than California, which maintains stricter vehicle emission standards than the EPA.

Pursuant to the CAA, the EPA designates areas as attainment, nonattainment, or maintenance for each criteria pollutant based on whether the NAAQS have been achieved. As of December 31, 2021, the EPA designates Ventura County as a nonattainment area for O_3.

State

California Clean Air Act (CCAA)

The California Air Resources Board (CARB) is responsible for administering the CCAA and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA requires air districts in the State to achieve and maintain the CAAQS. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off -road equipment. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels. The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under State standards, Ventura County is designated as a nonattainment area for O_3, PM-10, and PM-2.5. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard and are not used as a basis for designating areas as nonattainment.

Local

Air Quality Management Plan (AQMP)

The VCAPCD prepares Air Quality Management Plans (AQMPs) for meeting federal and State air quality standards, the most recent of which is the 2022 AQMP, and develops rules and regulations and permitting requirements.

Ventura County Air Quality Assessment Guidelines

The VCAPCD provides the Ventura County Air Quality Assessment Guidelines, with detailed guidance on how to evaluate and mitigate a project's air quality impacts.

Air Quality Planning

The Clean Air Act (CAA) requires areas that are not attaining the National Ambient Air Quality Standards (NAAQS or federal standards) to develop and implement an emission reduction strategy that will bring the area into attainment in a timely manner. The State of California also requires all feasible measures towards achievement of State of California ambient air quality standards (CAAQS or State standards) at the earliest practicable date. The VCAPCD develops and implements air quality attainment plans for the County that identify the pollution-control measures needed to meet clean air standards, focused on attaining and maintaining both the State and federal ozone standards. These plans influence a range of activities such as the development of rules and regulations, transportation planning, and the allocation of funds for air-quality

projects. Ventura County is designated as non-attainment for the State 1-hour ozone standards, State and federal 8-hour ozone standards, and State PM-10 standards.[3]

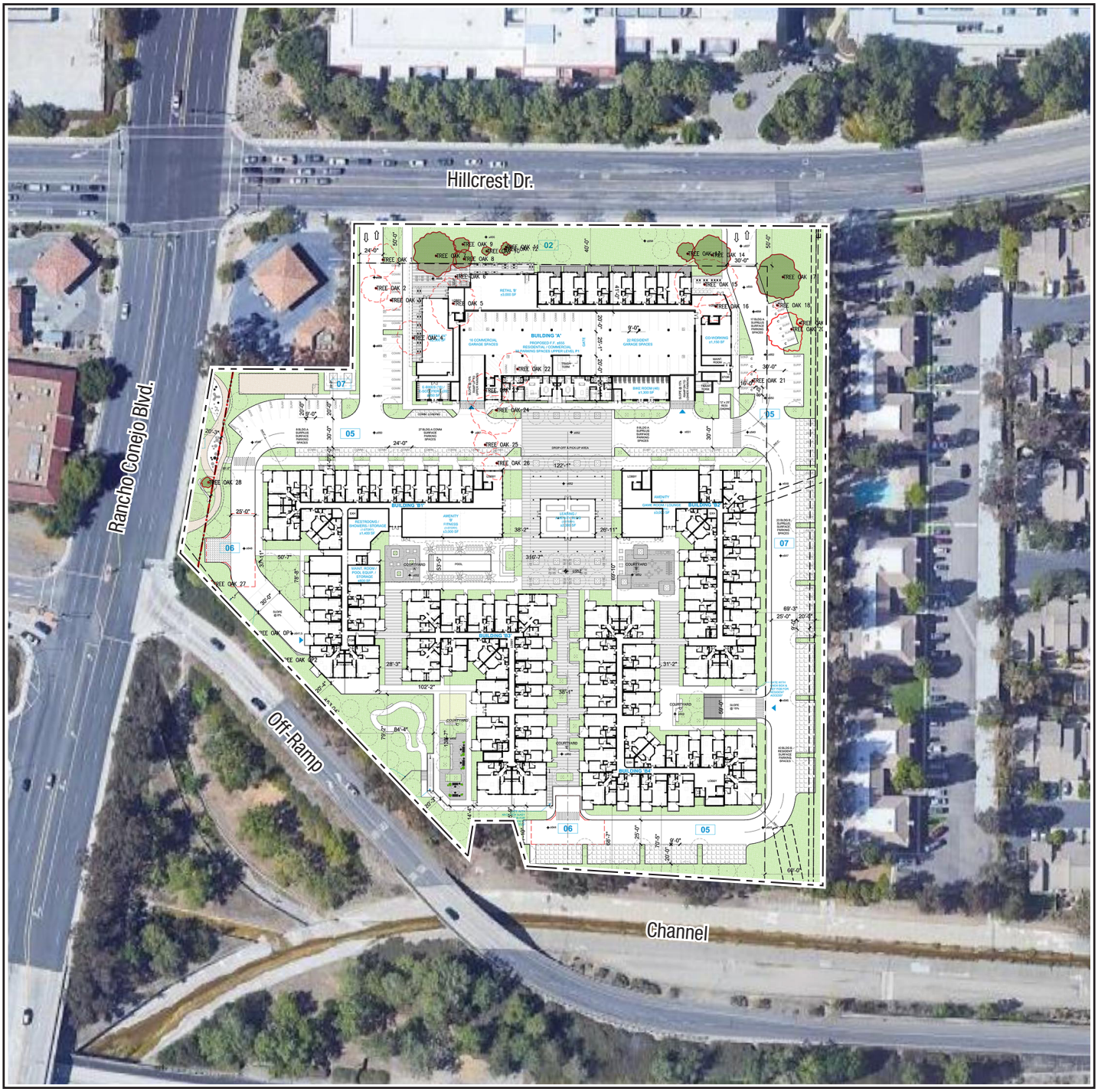
4.0 PROPOSED DEVELOPMENT

The project would demolish the existing approximately 56,000-square foot office building and associated paving, resulting in an estimated 8,140 tons of demolition debris to be hauled from the site. The project would construct a mixed-use development with a total of 333 multi-family residential apartment units, 5,300 square feet of commercial use, and associated amenities. A total of 30 of the proposed residential units would be designated as affordable housing units for Very Low-Income Households. The development would primarily consist of two structures of up to four stories over underground parking garages. During construction, grading of the site and excavation for the underground garage levels would require export of approximately 48,100 cubic yards (cy) of soil material. During construction, the project would utilize off-road diesel equipment that would meet or exceed EPA Tier 4 Final emissions reduction criteria for diesel-powered construction equipment.

The northern structure would include residential units and amenity spaces on the upper levels; residential units, commercial spaces, amenity spaces, and vehicle parking on the ground level; and one level of underground parking. The southern structure would consist of residential units and amenity spaces with an underground parking garage and would appear as four separate structures up to four stories above ground, and a one-story leasing office/mail structure with one contiguous underground parking level below. The residential units and amenities of the proposed structures would consist of approximately 428,763 square feet of floor space. The ground level and underground parking garage structures would provide a combined total of 462 parking spaces within a total of approximately 195,874 square feet of floor space. An additional 119 parking spaces would be provided as surface parking lot spaces along the project's onsite driveways. **Figure 3, Project Site Plan** depicts the general layout of the proposed structures, driveways, and surface parking spaces within the property. The project's amenity spaces would include lobbies, a fitness room, game room/lounge, and a co-working room, as well as roof deck areas. The project would also include a swimming pool and courtyards throughout the site. Additional project features would include:

- No natural gas appliances in residential units.
- Electric Vehicle (EV) Accommodations that meet or exceed requirements of the California Green Building Standards Code (Part 11, Title 24, California Code of Regulations), known as CALGreen consisting of:
  - 226 EV Capable parking spaces (40% of overall Parking) with pre-wiring installed for future Level 2 EV Charging (10% required per CALGreen).
  - 141 EV Ready parking spaces (25% of overall Parking) equipped with low power Level 2 EV charging 120-240 volt 30 Amp receptacles (25% required per CALGreen)
  - 57 EV Chargers (10% of Overall Parking) equipped with Level 2 EVSE Supply Equipment (5% required per CALGreen) available at initial occupancy.
- Indoor/Outdoor bike parking with electric bicycle charging stations.

[3] Ventura County Air Pollution Control District, Air Quality Standards, Accessed at http://www.vcapcd.org/air_quality_standards.htm.



Source: ktgy Architecture & Planning, Mar. 23, 2023. Aerial Source: Google Earth Pro, Mar. 8, 2020.

Project Site Plan

FEET 0 75 150

FIGURE 3

5.0 AIR QUALITY IMPACTS

Significance Criteria

State CEQA Guidelines

Air quality impacts of a project are considered significant if they cause clean air standards to be violated where they are currently met, or if they substantially contribute to an existing violation of standards. Substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, that are generated by a project, would also be considered significant impacts.

As set forth in Appendix G, Environmental Checklist, of the State CEQA Guidelines, a project could have a potentially significant impact if it would:

a. Conflict with or obstruct implementation of the applicable air quality plan;
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard;
c. Expose sensitive receptors to substantial pollutant concentrations; and/or
d. Result in other emissions such as those leading to odors adversely affecting a substantial number of people.

AQMP Consistency

The VCAPCD Guidelines state that project consistency with the AQMP can be determined by comparing the actual population growth in the county with the projected growth rates used in the AQMP. Therefore, a demonstration of consistency with the population forecasts used in the most recently adopted AQMP should be used for assessing project consistency with the AQMP.

The Ventura County 2022 population is estimated at 833,652 a 0.9 percent growth decrease from 2021.[4] The AQMP estimates that the population will increase to 905,574 by 2025.[5] The project would construct 333 residential units. Based on the City's average household size of 2.75 persons,[6] the project would house approximately 916 residents. If all project residents were new to Ventura County, the addition of the project's residents would increase the projected County population to 834,568, which would be within the County's anticipated population growth forecast for 2025. The project's anticipated buildout year is 2026, and thus the population housed by the project would be an even smaller proportion of the County's anticipated population growth forecast for 2026 compared to the anticipated population growth for 2025.

The VCAPCD Guidelines also state that "if there are more recent population forecasts that have been adopted by the Ventura Council of Governments (VCOG) where the total county population is lower than that included in the most recently adopted AQMP population forecasts, lead agencies may use the more recent VCOG forecasts for determining AQMP consistency." According to the Southern California Association of Governments (SCAG) Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), the projected population for Ventura County for the years 2020 and 2030 are 877,000 and 906,000, respectively. By interpolation, the County's 2026 population

[4] California Department of Finance (DOF), E-1: City/County/State Population Estimates with Annual Percent Change January 1, 2021 and 2022, Accessed at: https://dof.ca.gov/wp-content/uploads/Forecasting/Demographics/Documents/E-1_2022PressRelease.pdf.
[5] Ventura County APCD, email communication to Envicom Corporation regarding VCAPCD AQMP Consistency Population Forecasts, Aug 26, 2019.
[6] U.S. Census, 2010 (Table DP-1); ACS, 2015-2019 (Table B11001, B11003).

would be 894,400 based on the 2020-2045 RTP/SCS. The project-related population growth over current levels would also be within the more recently adopted population forecasts.

Therefore, the project would not generate growth exceeding the most recently adopted AQMP population forecasts and thus would not be inconsistent with the AQMP. The project's potential to conflict with or obstruct implementation of the AQMP resulting in environmental impacts would be less than significant.

VCAPCD Significance Thresholds for Ozone Precursors ROC and NO_X

For projects within the City, the VCAPCD Guidelines,[7] provides "reactive organic compounds (ROC) and NOx thresholds that the VCAPCD has determined will individually and cumulatively jeopardize attainment of the federal one-hour ozone standard, and thus have a significant adverse impact on air quality in Ventura County" which are as follows:

1. ROC 25 lbs/day
2. NO_X 25 lbs/day

According to the VCAPCD Guidelines, construction-related emissions (including portable engines and portable engine-driven equipment subject to the CARB's Statewide Portable Equipment Registration Program, and used for construction operations or repair and maintenance activities) of ROC and NOx are not counted towards the two significance thresholds, since these emissions are temporary. However, the VCAPCD Guidelines state that if a project's estimated construction-related emissions of ROC and NOx would exceed 25 lbs/day, APCD recommends the following measures to mitigate ozone precursor emissions from construction motor vehicles:

1. Minimize equipment idling time.
2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.
3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time.
4. Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible.

For the following evaluations, the California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to identify the project's maximum daily emissions for each criteria pollutant during construction activities and operations. CalEEMod is a Statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The model was developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts and is used by jurisdictions throughout the state to quantify criteria pollutant emissions. The VCAPCD currently recommends continued use of CalEEMod version 2020.4.0 rather than the newly released 2022.1 version.[8]

[7] Ventura County Air Pollution Control District, Ventura County Air Quality Assessment Guidelines, Technical Revision October 2003.

[8] Envicom email correspondence with Nicole Collazo, VCAPCD, February 23, 2023.

Sensitive Receptors

Air quality impacts are analyzed relative to those persons with the greatest sensitivity to air pollution exposure. Such persons are called "sensitive receptors." Sensitive receptors include the elderly, young children, the acutely and chronically ill (e.g., those with cardio-respiratory disease, including asthma), and persons engaged in strenuous work or exercise. As discussed in the Project Setting, surrounding development includes residential, commercial, and business park uses. The nearest sensitive use is an apartment complex located adjacent to the eastern boundary of the subject property.

Construction Emissions Methodology and Impacts

The proposed project's estimated construction emissions were modeled using CalEEMod Version 2020.4.0 to identify maximum daily emissions for each pollutant during project construction. The output reports from CalEEMod are included as **Appendix A** to this report. Construction emissions were modeled based primarily on the size of the project site and the proposed land use type and floor space, and the estimated duration of construction activities and types of equipment to be used.

Maximum daily pollutant emissions from construction activities include emissions from worker trips, hauling trips, construction vehicle emissions and fugitive dust from Site Preparation, Grading, Paving, Building construction, and Architectural Coating phases. Project details that were applied to CalEEMod are reported in the CalEEMod output sheets provided in Appendix A, including the proposed number of residential units, floor areas of residential and residential amenity spaces, commercial use floor space, parking garage spaces, and surface parking lot spaces.

The project's conceptual construction equipment fleet list and approximate duration of each construction activity phase used in estimating construction emissions using CalEEMod is shown in **Table 4, Conceptual Construction Equipment Fleet**.

Additional project-specific construction data used in the model include:

- 48,100 cubic yards (cy) soil export.
- 18 cy capacity soil export dump trucks.
- 8,140 tons building and pavement demolition debris removal.
- Off-road Construction Equipment meeting EPA Tier 4 standards.
- VCAPCD Rule 55 construction fugitive dust control measures - watering exposed soils twice daily.
- VCAPCD Rule 74.2 limiting architectural coatings applied to residential and commercial use interior and exterior surfaces to 50 g/L VOC content.
- Paving and Architectural Coating phases would overlap with Building Construction phase activities.

To reduce potential emissions of ozone precursors during construction, off-road construction equipment used on the site will meet the Tier 4 emission reduction standards of USEPA as a project design feature, and in compliance with VCAPCD Rule 74.2 (Architectural Coatings), which became effective July 1, 2021, the project would use paints with a maximum VOC content of 50 grams per liter (g/L) for residential and commercial interior and exterior surfaces. The project's estimated maximum daily construction emissions, as calculated by CalEEMod are summarized in **Table 5, Construction Emissions**.

Table 4
Conceptual Construction Equipment Fleet

Phase	Duration (est. 5 days per week)	Equipment Type [a]	(# of pieces)
Demolition	20 days	Concrete Saw	1
		Dozers	1
		Excavator	1
		Bobcats	1
Grading	65 days	Excavators (Tier 4)	1
		Front-end Loader (Tier 4)	1
		Rubber Tired Dozers (Tier 4)	1
		Tractor/Loader/Backhoe (Tier 4)	1
Building Construction	655 days	Cranes (Tier 4)	2
		Forklifts(Tier 4)	4
		Generator Sets	2
		Welders	2
Paving	20 days [b]	Pavers	2
		Paving Equipment	2
		Rollers	2
Architectural Coating	145 days [b]	Air Compressors	1

Source: CalEEMod defaults, with adjustments for project-specific data from RCI Builders, December, 2022.
[a] The Project would use off-road construction equipment that meets or exceeds EPA Tier 4 Final emissions reduction standards and certification requirements.
[b] Paving and Architectural Coating phases would overlap with Building Construction phase activities.

Table 5
Construction Emissions

	Maximum Daily Emissions (lbs/day) [a]					
	ROG	NO_X	CO	SO_2	PM-10	PM-2.5
Construction Emissions [b, c]	21.03 [d]	13.87	49.38	0.10	5.80	1.81
VCAPCD Thresholds	25	25	-	-	-	-
Exceeds Threshold? Yes/No	No	No	-	-	-	-

Source: CalEEMod output, March 29, 2023.
[a] Maximum daily emissions for all years of construction. Summer or Winter season, whichever is greatest.
[b] The Project would use off-road diesel-powered equipment that meets USEPA Tier 4 Final emissions standards.
[c] Includes watering of exposed surfaces twice daily for dust suppression as required by VCAPCD Rule 55.
[d] Exterior and commercial paints with 50 g/L VOC content (APCD Rule 74.2).

As shown in Table 5, based on the duration of construction activities and the equipment to be utilized onsite, the project's short-term construction-related emissions of ROG or NOx would not exceed the VCAPCD guideline of 25 lbs/day and therefore would not trigger the need for mitigation measures. Additionally, VCAPCD Rule 55 requires projects to minimize construction fugitive dust emissions, which includes but is not necessarily limited to the following best management practices:

- Apply water to disturbed soils of the site at least twice daily during construction.
- Require the use of a gravel apron and/or rumble pad at truck exit points to reduce mud and dirt trackout onto area roadways.
- All soil materials transported off-site shall be securely covered during transit.

- Apply non-toxic soil stabilizers according to manufacturers' specifications to all graded areas that remain inactive for ten days or more).
- Limit traffic speeds on all unpaved portions of the site to 15 mph or less by providing worker notification, signage, or other means.

Operational Emissions Methodology and Impacts

During operations, the proposed uses would result in emissions of criteria pollutants from area sources (i.e., consumer products, architectural coatings, and landscaping equipment), energy sources (electricity and natural gas usage), and mobile sources (vehicle use), which were also calculated using CalEEMod. As the existing structure on the site has been vacant since 2021, this analysis assumes that baseline operational emissions under existing conditions is zero.

Project details that were applied to CalEEMod for determining operational emissions are reported in the CalEEMod output sheets provided in Appendix A, including the proposed number of residential units, floor areas of residential and residential amenity spaces, commercial use floor space, parking garage spaces, and surface parking lot spaces.

Project-specific operations data used in the model as reported in the attached CalEEMod output sheets (Appendix A) include:

- VCAPCD Rule 74.2 limiting architectural coatings applied for residential and commercial use structures to 50 g/L VOC content.
- Hill Canyon Wastewater Treatment Plant details.
- 1,788 total average daily trips per the project's Traffic, Circulation and Vehicle Miles Traveled (VMT) Study (Traffic Study).[9]

No adjustments were made in the CalEEMod that account for how the project would increase the density of use within the infill site, would be adjacent to and near commercial uses and employment centers (destination accessibility), will include below market rate housing, and provides a co-work amenity space to encourage telecommuting/alternate work schedules. Also, no adjustments were made in CalEEMod regarding reduced water use due to requirements to provide high efficiency plumbing fixtures to promote water conservation. Additionally, the project would not include natural gas appliances in the proposed residences, would provide EV facilities onsite (parking spaces that are EV-capable or EV-ready, as well as spaces with EV charging equipment installed), and bicycle storage rooms equipped with electric bike chargers. These features would further reduce potential operational emissions below those calculated by CalEEMod. As such, the estimated operational emissions calculated by CalEEMod are conservatively high, and actual operational emissions would be lower as a result of reductions that would occur due to features of the project site, surroundings, and proposed development.

Table 6, Maximum Daily Operational Emissions, summarizes the estimated emissions of criteria pollutants during operations of the proposed project. Table 6 also shows the applicable VCAPCD significance thresholds and summarizes if the project's emissions would exceed applicable thresholds.

[9] Stantec, 2150 Hillcrest Drive Traffic, Circulation and Vehicle Miles Traveled (VMT) Study, March 23, 2023.

Table 6
Maximum Daily Operational Emissions

	Emissions (Pounds/Day)					
Emissions Sources	**ROG**	**NO_X**	**CO**	**SO_2**	**PM-10**	**PM-2.5**
Summer Emissions						
Area	10.97	0.32	27.51	0.00	0.15	0.15
Energy	0.11	0.94	0.40	0.00	0.08	0.08
Mobile [a]	4.62	4.57	38.96	0.08	9.66	2.62
Total	**15.70**	**5.82**	**66.87**	**0.09**	**9.89**	**2.85**
Winter Emissions						
Area	10.97	0.32	27.51	0.00	0.15	0.15
Energy	0.11	0.94	0.40	0.00	0.08	0.08
Mobile [a]	4.47	5.04	41.54	0.08	9.66	2.84
Total	**15.55**	**6.30**	**69.45**	**0.09**	**9.89**	**2.85**
Maximum Total	**15.70**	**6.30**	**69.45**	**0.09**	**9.89**	**2.85**
VCAPCD Thresholds	25	25	-	-	-	-
Significant Impact? Y/N	**No**	**No**				

Source: CalEEMod output, March 29, 2023.
Totals may differ from sums due to rounding.
[a] CalEEMod default trip rates were adjusted per the project's Traffic Study.

As seen in Table 6, during operations the project would not exceed the thresholds that the VCAPCD has determined for projects that will individually and cumulatively jeopardize attainment of the federal one-hour ozone standard. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard.

Toxic Air Contaminants

Exhaust particulates emitted from diesel powered equipment contains carcinogenic compounds, or toxic air contaminants (TACs). A Health Risk Assessment (HRA) has been conducted by Air Quality Dynamics[10] to evaluate the potential effects of diesel emissions generated at the site during construction. The HRA, which is provided as a separate technical report, determined the potential effects of diesel emission TACs generated during construction would be less than significant.

During operations, multifamily-residential and commercial uses are typically not associated with substantial diesel truck use, and emissions of TACs associated with diesel exhaust during operations would be less than significant.

Carbon Dioxide Hot Spots

A CO hotspot is a localized concentration of CO that is above the State or national 1-hour or eight hour CO ambient air standards. Localized CO "hotspots" can occur at intersections with heavy peak hour traffic that could cause local CO concentration to exceed federal or State AAQS. According to the VCAPCD Guidelines, a CO hotspot screening analysis should be conducted for any project with indirect emissions greater than the applicable ozone project significance thresholds that may significantly impact roadway intersections that are currently operating at, or are expected to operate at, Levels of Service E, or F. As

[10] Air Quality Dynamics, Latigo Hillcrest Mixed-Use Project: Construction Health Risk Assessment, April 3, 2023.

shown in Tables 5 and 6, the project's emissions of ozone precursors ROG or NOx would not exceed the VCAPCD significance thresholds. Additionally, the project's Traffic Study did not identify any roadway intersections currently or anticipated to operate at Levels of Service E or F. As such, pursuant to VCAPCD Guidelines, a CO hotspot screening analysis for this project would not be warranted and potential impacts would be less than significant.

San Joaquin Valley Fever

San Joaquin Valley Fever (formally known as Coccidioidomycosis) is an infectious disease caused by the fungus Coccidioides immitis. Infection is caused by inhalation of Coccidioides immitis spores that have become airborne when dry, dusty soil or dirt is disturbed by wind, construction, farming, or other activities. The Valley Fever fungus tends to be found at the base of hillsides, in virgin, undisturbed soil and is found in the southwestern United States. In its primary form, symptoms appear as a mild upper respiratory infection, acute bronchitis, or pneumonia. The most common symptoms are fatigue, cough, chest pain, fever, rash, headache, and joint aches, although 60 percent of people infected are asymptomatic and do not seek medical attention. In the remaining 40 percent, symptoms range from mild to severe. There is no recommended threshold for a significant San Joaquin Valley Fever impact; however, according to the VCAPCD the following factors may indicate a project's potential to create significant Valley Fever impacts:

- Disturbance of the top soil of undeveloped land (to a depth of about 12 inches).
- Dry, alkaline, sandy soils.
- Virgin, undisturbed, non-urban areas.
- Windy areas.
- Archaeological resources probable or known to exist in the area (Native American midden sites).
- Special events (fairs, concerts) and motorized activities (motocross track, All Terrain Vehicle activities) on unvegetated soil (non-grass).
- Non-native population (i.e., out-of-area construction workers).

According to the VCAPCD Guidelines, the lead agency should consider the factors above that are applicable to the project or the project site. Based on these or other factors, if a lead agency determines that a project may create a significant Valley Fever impact, the VCAPCD recommends that the lead agency consider the Valley Fever mitigation measures listed in the VCAPCD Guidelines to minimize fugitive dust as well as minimizing worker exposure. The VCAPCD Guidelines provides the following list of measures to be considered if the lead agency determines a project site poses a risk of San Joaquin Valley Fever:

1. Restrict employment to persons with positive Coccidioidin skin tests (since those with positive tests can be considered immune to reinfection).
2. Hire crews from local populations where possible, since it is more likely that they have been previously exposed to the fungus and are therefore immune.
3. Require crews to use respirators during project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations.
4. Require that the cabs of grading and construction equipment be air-conditioned.
5. Require crews to work upwind from excavation sites.
6. Pave construction roads.

7. Where acceptable to the fire department, control weed growth by mowing instead of discing, thereby leaving the ground undisturbed and with a mulch covering.
8. During rough grading and construction, the access way into the project site from adjoining paved roadways should be paved or treated with environmentally-safe dust control agents.

The proposed project site is an infill property that is fully developed with buildings and a paved parking lot and planters with remnant landscaping. As such, development of the project would not disturb top soil of undeveloped land, or occur within virgin, undisturbed, non-urban areas. The project site also does not include archaeological resources (Native American midden sites), and the project would not host special events or motorized activities on unvegetated soil during operations. Additionally, the project would be required by VCAPCD Rule 55 to implement measures to minimize fugitive dust during construction, including application of water to exposed soils, which would minimize dust from dry soils or during windy days, which would further reduce the potential for a substantial risk of San Joaquin Valley Fever effects.

As such, the factors that according to VCAPCD may indicate potential Valley Fever impacts do not apply to the project site and proposed activities. Therefore, the potential for the project to result in substantial San Joaquin Valley Fever impacts would be less than significant.

Odor Impacts

Land uses typically associated with objectionable odors that potentially adversely affect a substantial number of people include manufacturing, industrial, agricultural, or sewage treatment processes, and typically are not associated with residential and commercial land uses such as the project.

During construction, the application of certain materials (i.e., asphalt, paints, etc.) may generate odors within various portions of the site that would be temporary in nature and are common to construction projects. For operations, the project will include enclosure for trash and recyclable bins, to be emptied on a regular basis, and therefore would not generate objectionable odors that adversely affect a substantial number of people. As such, odor impacts of the project during construction and operation would be less than significant.

6.0 ENERGY CONSUMPTION

Based on the CEQA Appendix G guidelines, a project would have a potentially significant GHG impact if it would:

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

Energy Usage

Construction

During construction, the project would consume fuels associated with the onsite use of equipment, off-site hauling of materials and supplies, and worker transportation. The California Code of Regulations requires drivers of diesel-fueled commercial motor vehicles with gross vehicle weight ratings greater than 10,000 pounds not to idle the vehicle's primary diesel engine longer than five minutes at any location.[11] Compliance

[11] California Code of Regulations, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.

with this regulation would prevent unnecessary consumption of energy from use of diesel fuel during construction.

Electricity use during construction would primarily be associated with water use for dust suppression, operation of a mobile office trailer, and nighttime lighting. When not in use, electric equipment and devices would be powered off to avoid unnecessary energy consumption. Night lighting of the project site during construction would also be limited to that needed for safety and security purposes. Electricity necessary to supply water to the construction site is estimated to be 1,028 kilowatt-hours (kWh) for dust suppression during grading activities.[12] Electricity use for a mobile office trailer is conservatively estimated at 7,819 kWh.[13] Electricity consumption of nighttime lighting is not calculated as the contribution of security LED lighting (assuming solar security lights are not used) would be nominal and likely accounted for within the overestimate of the mobile office. Total electricity consumption during construction is therefore estimated at 8,847 kWh. These activities would cease upon completion of the project, and the overall demand for electricity during construction would be negligible when compared to the project operational phase.

The demolition, grading, and building development activities that would be associated with project construction do not typically rely on natural gas as an energy source. Therefore, substantial quantities of natural gas would not be consumed in support of project construction.

The project's demand for transportation fuels, gasoline and diesel, is provided in **Table 7, Project Construction Energy Use**. The fuel consumption that is necessary to power off-road equipment is based on the quantity and type of equipment that would be used for each construction phase, the duration of use each day, the total construction period duration, and the hourly construction equipment fuel consumption factors that are made available by the OFFROAD model. On-road equipment includes haul trucks and vendor trucks, which are powered by diesel fuel, as well as vehicles associated with construction worker commuter trips, which are assumed to be primarily powered by gasoline. The fuel consumption for on-road trucks is based on fuel consumption information from the EMFAC model. The fuel demand for construction worker commuter trips is based on the estimated number of workers for each phase of construction and the average distance that workers travel from CalEEMod, as well as on the emissions factors from the EMFAC model.

As shown in Table 7, project construction activities would result in the consumption of 168,926 gallons of diesel fuel and 100,468 gallons of gasoline.

Table 7
Project Construction Energy Use

Energy Source	Quantity Demanded during Construction
Electricity [a]	
Electricity Total	**8,847 kWh**
Natural Gas	
Natural Gas Total	**N/A**[b]
Transportation Fuels [c]	
Gasoline	
On-road Worker Trips	78,878 gal
Gasoline Total	**78,878 gal**

[12] Calculated at a rate of 3,020 gallons per acre. Source: Air & Waste Management Association, Air Pollution Engineering Manual, 1992.
[13] CalEEMod estimate for energy consumption of one 1,300sf mobile home over entire construction period. An actual construction mobile office would typically be 700 square-feet or less in size.

Energy Source	Quantity Demanded during Construction
Diesel	
On-road Haul Trucks	13,189 gal diesel
On-road Vendor Trucks [d]	45,861 gal diesel
Off-road Construction Equipment [e]	107,728 gal diesel
Diesel Total	**166,779 gal diesel**

Source: Mobile Fuel Use Worksheet and Construction Electricity Consumption Worksheet, provided in Appendix B, and CalEEMod Output Sheets, included in Appendix A.

[a] Electricity for construction includes water Usage for fugitive dust control at 3,020 gal per acre and use of Mobile office.
[b] Construction equipment assumptions do not include liquefied natural gas (LNG) powered vehicles. It is not anticipated that a substantial portion of the construction equipment fleet would consist of LNG-powered vehicles.
[c] On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod and fleet-average fuel consumption in gallons per mile from EMFAC2021 web based data.
[d] Vendor trucks assumed to be diesel
[e] All emissions from off-road construction equipment were assumed to be diesel. Off-road mobile source fuel usage based on a fuel usage rate of 0.05 gallons of diesel per horsepower (HP)-hour, based on SCAQMD CEQA Air Quality Handbook, Table A9-3E.

Operations

During operations, the project would consume energy for vehicle trips, water conveyance, wastewater treatment, lighting, and to operate electronic equipment and devices and HVAC systems. This will generate demand from utilities; electricity from Southern California Edison (SCE) and natural gas from Southern California Gas Company (SoCalGas). According to the California Energy Commission, Ventura County consumed 5,242.3 Gigawatt hours (GWh) or 5,242,300 Megawatt hours (MWh) of electricity in 2021, and 175.7 million therms of natural gas.[14] The project's estimated energy use during operations is summarized in **Table 8, Project Operations Energy Use**.

Table 8
Project Operations Energy Use

Energy Source	Quantity Demanded during Operations per Year
Electricity	2.4 million kWh / 2,418 MWh
Natural Gas	3.7 million kBtu / 37,243 therms
Transportation Fuels [a]	
Gasoline	162,060 gallons
Diesel	40,243 gallons

Source: CalEEMod Annual output sheets, included in Appendix A.

kWh = kilowatt-hours
MWh = Megawatt-hours
kBTU = kilo-British Thermal Units
[a] Project gasoline and diesel use during operations are calculated based on the VMT estimated by CalEEMod Annual Output. It is assumed that light-duty vehicles use gasoline, while heavy-duty (Gross Vehicle Weight Rating > 8,500 pounds) use diesel. CalEEMod calculates light-duty vehicles account for approximately 91 percent of project VMT. Calculations shown in Mobile Fuel Use Worksheet, provided in Appendix B. Project gasoline and diesel use are calculated based on fuel consumption factors for calendar year 2023 from EMFAC2021 (25.56 miles per gallon for gasoline-fueled vehicles and 10.18 miles per gallon for diesel-fueled vehicles).

As estimated by CalEEMod and shown in Table 8, the project's total electricity demand would be approximately 2,417,869 kilowatt hours per year (kWh/year) or 2,418 megawatt hours per year (MWh/year). The County consumed 5,242,300 MWh in 2021. The project would represent approximately 0.05 percent of the yearly electricity demand, which is a negligible amount of total demand in the County.

[14] California Energy Commission, California Energy Consumption Database, 2021 Electricity Consumption by County and Gas Consumption by County, accessible at: http://www.ecdms.energy.ca.gov/

Therefore, the project would not result in substantial increase in electricity demand. Total project demand for natural gas would be approximately 37,243 therms per year as estimated by CalEEMod outputs. According to the California Energy Commission, the County consumed 175.7 million therms of natural gas in 2021. The project would represent approximately 0.02 percent of the County's consumption rate, which is a negligible amount. Actual natural gas consumption would be less as residential units will not be equipped with natural gas appliances, and CalEEMod assumes natural gas connections as a default that is not adjustable. Therefore, the project would not result in a substantial increase in demand for natural gas. The project will be required to comply with the 2022 California Energy Code and California Green Building Standards Code (CALGreen Code), which establish planning and design standards for sustainable development, energy efficiency, water conservation, and material conservation. The CalEEMod model used estimates energy use according to the 2019 codes, and therefore overestimates building energy consumption. Through compliance with applicable energy efficiency regulations the project's potential impacts regarding wasteful or inefficient use of energy supplies would be less than significant.

According to the CARB on-road vehicle emissions factor model EMFAC2021(v1.0.2) Emissions Inventory, the average fuel economy for light duty vehicles operating in the County of Ventura for the year 2023 is approximately 25.56 miles per gallon for gasoline-fueled vehicles and approximately 10.18 miles per gallon for all categories of diesel-fueled vehicles. As shown in the Operational Fuel Use worksheet provided in Appendix B, based on the CalEEMod Output Sheets, included in Appendix A, the project would generate approximately 4,551,934 VMT annually, 91 percent of which would comprise light-duty vehicles with a gross vehicle weight rating (GVWR) of up to 8,500 pounds, and approximately 9 percent of which would comprise heavy-duty vehicles (GVWR > 8,500 pound). Light-duty vehicles are considered to be gasoline powered and heavy-duty vehicles are considered to be diesel-fueled. As such, during operations the project would generate approximately 4,142,260 annual VMT with gasoline-fueled vehicles, and approximately 409,674 annual VMT with diesel-fueled vehicles. Based on the State's projected fleet fuel mileage for the year 2023, during operations the project's demand for transportation fuels would be approximately 162,060 gallons of gasoline, and approximately 40,243 gallons of diesel fuel, annually. According to the California Department of Tax and Fee Administration 13.8 billion gallons of gasoline were sold in California in 2021, and 3.1 billion gallons of diesel fuel, the majority of that being used for medium and heavy-duty commercial vehicles.[15] The project's contribution to demand would equal .0001 percent of current demand for gasoline, and .0001 percent of the current demand for diesel fuel.

In summary, the project would result in the consumption of energy in the forms of electricity, natural gas, and transportation fuels at rates that represent only a negligible amount of current demand in the County. The project would be required to comply with federal, State, and local regulations aimed to reduce the inefficient, wasteful, and unnecessary consumption of energy. Conformance to these codes will ensure the project's buildings are designed to not require an excessive amount of energy to function and do not unnecessarily waste energy. The siting of the multifamily building in a location near employment and shopping in a traditionally suburban locale will increase the opportunity for residents to live in close proximity to their workplace, thus reducing Citywide VMT and mobile energy consumption. Therefore, the project's energy requirements and its energy use efficiencies would result in a less-than-significant impact related to the wasteful, inefficient, and unnecessary consumption of energy.

[15] California Department of Tax and Fee Administration. Fuel Taxes Statistics & Reports. Available at: https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm. Accessed on March 22, 2023.

Energy Plan Consistency

The City would review project site plans to verify compliance with the Building and Energy Efficiency Standards in the California Energy Code prior to issuing a building permit. As a regulatory requirement, the project would be reviewed for consistency with applicable State and local plans for renewable energy and efficiency, including CALGreen Code Title 24 standards. CALGreen Code standards require projects to provide energy saving features, establish minimum standards for energy efficient construction practices, and require increased energy efficiency. The project would be built to the codes in effect at the time of construction. In addition, the project proposes a mixed-use development with residential and commercial uses on an infill site, would provide bicycle storage areas with electric bike (e-bike) charging stations to encourage active transportation and reduce VMT. To reduce use of transportation fuels, the project would include EV accommodations (parking spaces that are EV-capable or EV-ready, as well as spaces with EV charging equipment installed) that meet or exceed requirements of CALGreen. As the project would comply with regulatory requirements for building efficiency and incorporate features that encourage a reduction in the use of gasoline-fueled vehicles, the project would not conflict with a State or local plan for renewable energy or energy efficiency.

7.0 GREENHOUSE GAS EMISSIONS SETTING

Global Climate Change Overview

Climate change refers to any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among other effects, that occur over several decades or longer.[16] The Earth's climate has changed throughout history. Just in the last 650,000 years there have been seven cycles of glacial advance and retreat, with the abrupt end of the last ice age about 7,000 years ago marking the beginning of the modern climate era and of human civilization. Most of these climate changes are attributed to very small variations in Earth's orbit that change the amount of solar energy our planet receives.[17]

Earth's temperature depends on the balance between energy entering and leaving the planet's atmospheric system. When incoming energy from the sun passes through the atmosphere, it is absorbed by the Earth and warms the planet. Some of this heat energy is released back into the atmosphere as infrared radiation, where it may pass back into space, cooling the planet, or certain gases in the atmosphere may absorb it before leaving the Earth's atmospheric system. When this heat energy is blocked from escaping into space, heat is retained within Earth's atmospheric system, keeping the planet warmer than if the heat had passed into space. This process is commonly known as the "greenhouse effect", and atmospheric gases that absorb this heat energy are referred to as GHGs.[18]

Since the Industrial Revolution began around 1750, human activities have contributed substantially to climate change by adding carbon dioxide (CO_2) and other heat-trapping gases to the atmosphere. These GHG emissions have increased the greenhouse effect and caused Earth's surface temperature to rise. The primary human activity affecting the amount and rate of climate change is GHG emissions from the burning of fossil fuels.[19]

[16] U.S. Environmental Protection Agency, Frequently Asked Questions About Climate Change. Accessed on December 18, 2022, at: https://www.epa.gov/climatechange-science/frequently-asked-questions-about-climate-change#weather-climate.
[17] NASA, Global Climate Change Vital Signs of the Planet, Site last updated: December 16, 2022, Accessed on December 18, 2022, at: https://climate.nasa.gov/evidence/.
[18] U.S. Environmental Protection Agency, Basics of Climate Change, Accessed on December 18, 2022, at: https://www.epa.gov/climatechange-science/basics-climate-change#greenhouse.
[19] U.S. Environmental Protection Agency, Causes of Climate Change, Accessed on December 18, 2022, at: https://www.epa.gov/climatechange-science/causes-climate-change.

Greenhouse Gases

Section 38505(g) of the California Health and Safety Code defines GHGs to include the following compounds: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). Two important ways in which these gases differ from each other are their ability to absorb energy (their "radiative efficiency"), and how long they stay in the atmosphere (also known as their "lifetime"). The ability of equivalent masses of each GHG to trap heat in the atmosphere is measured by its global warming potential (GWP).[20] CO_2 is the reference gas used for GWP, and it has a GWP of one. The GWP of other GHGs are determined based on their heat trapping potential relative to CO_2. Because of this, GHG emissions are commonly expressed in terms of carbon dioxide equivalents (CO_2e), where CO_2e is calculated by the quantity of each GHG multiplied by its associated GWP factor. Below is a description of each GHG emission as described by the California Climate Action Registry (CCAR) General Reporting Protocol.[21]

- Carbon Dioxide (CO_2): Consisting of a single carbon and two oxygen atoms, CO_2 is the most common of the six primary GHG emissions, and it provides the reference point for the GWP of other gases. Thus, the GWP of CO_2 is equal to one.
- Nitrous Oxide (N_2O): Consisting of two nitrogen atoms and a single oxygen atom, N_2O possesses a GWP of 310 and is typically generated as a result of soil cultivation practices, particularly the use of commercial and organic fertilizers, fossil fuel combustion, nitric acid production, and biomass burning.
- Methane (CH4): Consisting of a single carbon atom and four hydrogen atoms, CH_4 possesses a GWP of 21 and is produced through the anaerobic decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.
- Hydrofluorocarbons (HFCs): Primarily used as refrigerants, HFCs consist of a class of gases containing hydrogen, fluorine, and carbon. They possess a range of high and very high GWP values from 120 to 12,000.
- Perfluorocarbons (PFCs): PFCs consist of a class of gases containing carbon and fluorine and are originally introduced as alternatives to ozone depleting substances. They are typically emitted as by-products of industrial and manufacturing processes and possess GWPs ranging from 5,700 to 11,900.
- Sulfur Hexafluoride (SF_6): SF_6 consists of a single sulfur atom and six fluoride atoms, possessing a very high GWP of 23,900. SF_6 is primarily used in electrical transmission and distribution systems.

Human Activity and Global Climate Change

According to the Intergovernmental Panel on Climate Change (IPCC), global GHG emissions due to human activities have grown since pre-industrial times, with an increase of 70 percent between 1970 and 2004. This increase has resulted from the burning of coal, oil, and natural gas (which generates GHGs, including CO_2), and the depletion of forests (which absorb CO_2) around the world to provide wood products and space for agriculture and other human activities.[22] Human activities result in emissions of four long-lived greenhouse gases: CO_2, CH_4, N_20, and halocarbons (a group of gases containing fluorine, chlorine or

[20] U.S. Environmental Protection Agency, Greenhouse Gas Emissions Understanding Global Warming Potentials, Accessed on December 18, 2022 at: https://www.epa.gov/ghgemissions/understanding-global-warming-potentials.
[21] California Climate Action Registry, General Reporting Protocol Version 3.1, January 2009.
[22] California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.

bromine). The global atmospheric concentrations of CO_2, CH_4, and N_20 have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values, which has been determined from ice cores spanning many thousands of years.

The IPCC asserts that most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic (related to human activity) GHG concentrations. The observed widespread warming of the atmosphere and ocean, together with ice mass loss, support the conclusion that it is extremely unlikely that global climate change of the past 50 years can be explained without external forcing and very likely that it is not due to known natural causes alone.[23]

Projected Impacts of Global Climate Change in California

The California Climate Action Team (CAT)/California Environmental Protection Agency (Cal EPA) March 2006 Report to Governor Arnold Schwarzenegger and the Legislature states that end-of-century projected climate change impacts may include Sierra snowpack loss, a rise in sea level, a rise in the number of critically dry years, increased large fire risk, increased electricity demand, a rise in the amount of urban area heat waves and heat related deaths, decreased forest yields, and an increase in days meteorologically conducive to ozone (O_3) formation.[24]

Greenhouse Gas Emissions Inventory

In an effort to evaluate and reduce the potential adverse impacts of global climate change, GHG inventories have been compiled to estimate the level of emissions and removals. The global, national, statewide, and Countywide inventories are summarized below.

Global

The Global Carbon Project releases an annual update of the global carbon budget and trends. According to the Global Carbon Budget 2021, the atmospheric CO_2 concentration in 2022 is 417.2 parts per million (ppm), 51 percent above the concentration at the start of the Industrial Revolution (about 277 ppm in 1750).[25]

United States

As reported by the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020,[26] "In 2020, total gross U.S. greenhouse gas emissions were 5,981.4 million metric tons of carbon dioxide equivalent (MMT CO_2e). Total U.S. emissions have decreased by 7.3 percent from 1990 to 2020, down from a high of 15.7 percent above 1990 levels in 2007. Emissions decreased from 2019 to 2020 by 9.0 percent (590.4 MMT CO_2e)."

The sharp decline in emissions from 2019 to 2020 is largely due to the impacts of the coronavirus (COVID-19) pandemic on travel and economic activity. However, the decline also reflects the combined impacts of long-term trends in many factors, including population, economic growth, energy markets, technological changes including energy efficiency, and the carbon intensity of energy fuel choices. Between 2019 and 2020, the decrease in total greenhouse gas emissions was driven largely by a 10.5 percent decrease in CO2 emissions from fossil fuel combustion, including a 13.3 percent decrease in transportation sector emissions

[23] Intergovernmental Panel on Climate Change, Climate Change 2007: Synthesis Report.
[24] California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.
[25] Global Carbon Project, Global Carbon Budget 2022, November 11, 2022, Accessed at: https://www.globalcarbonproject.org/carbonbudget/22/files/GCP_CarbonBudget_2022.pdf.
[26] U.S. Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020.

from less travel due to the COVID-19 pandemic and a 10.4 percent decrease in emissions in the electric power sector. The decrease in electric power sector emissions was due to a decrease in electricity demand of about 2.5 percent and also reflects the continued shift from coal to less carbon intensive natural gas and renewables.[27]

State of California

According to the CARB *California Greenhouse Gas Emissions for 2000 to 2020 Trends of Emissions and Other Indicators*, "In 2020, emissions from GHG emitting activities statewide were 369.2 MMT CO_2e, 35.3 MMT CO_2e lower than 2019 levels and 61.8 MMT CO_2e below the 2020 GHG Limit of 431 MMT CO_2e. The 2019 to 2020 decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. Economic recovery from the pandemic may result in emissions increases over the next few years. As such, the total 2020 reported emissions are likely an anomaly, and any near-term increases in annual emissions should be considered in the context of the pandemic."[28]

Per capita GHG emissions in California have dropped from a 2001 peak of 13.8 metric tons per person to 9.3 metric tons per person in 2020, a 33 percent decrease. Overall trends in the inventory also continue to demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product (GDP)) is declining. From 2000 to 2020, the carbon intensity of California's economy decreased by 49 percent while the GDP increased by 56 percent. Likely in part due to the COVID-19 pandemic, GDP fell 2.8 percent in 2020 while the emissions per GDP declined by 6.1 percent compared to 2019.[29]

City of Thousand Oaks

The total Community GHG emissions for the City of Thousand Oaks for the year 2012 were estimated at 886,369 metric tons of CO_2e (MT CO_2e).[30] Significant strides have been made in reducing community emissions over the past decade even as the City's population has grown, with 2020 emissions 27.7 percent lower than the 2010 City baseline values. This reduction is primarily due to energy conservation, a transition to more renewable energy, and improved vehicle fuel efficiency. The most dramatic reduction in emissions from electricity use resulted from the switch to Clean Power Alliance as the community's electricity provider. The change occurred in early 2019, with the default option set at 100 percent renewable energy for residents and businesses.[31]

Regulatory Setting

The following includes a discussion of the applicable federal, State, and local regulations associated with GHG emissions.

[27] ibid.
[28] California Air Resources Board, California Greenhouse Gas Emissions for 2000 to 2020 Trends of Emissions and Other Indicators, October 26, 2022.
[29] California Air Resources Board, California Greenhouse Gas Emissions for 2000 to 2020 Trends of Emissions and Other Indicators, October 26, 2022.
[30] Ventura County Regional Energy Alliance, Climate On the Move, December 2015.
[31] City of Thousand Oaks, Greenhouse Gas Inventory and Targets, September 20, 2021, Accessed on December 19, 2022 at: https://storymaps.arcgis.com/stories/94c3fc9e69244693a56bf222234c506a.

Federal

Federal Clean Air Act

The U.S. Environmental Protection Agency (EPA) is responsible for implementing federal policy to address GHGs. In Massachusetts v. EPA (549 US 497 [2007]) the U.S. Supreme Court found that CO_2 and other greenhouse gases (GHGs) are pollutants under the Clean Air Act (CAA) and could be regulated by the EPA. The Court did not require the EPA to regulate GHG emissions, but indicated the agency must decide whether GHGs cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009 the EPA administrator made two finding regarding GHGs under Section 202(a) of the CAA:

> Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases (CO2, methane [CH_4], nitrous oxide [N_2O], hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF_6]) in the atmosphere threaten the public health and welfare of current and future generations.
>
> Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution that threatens public health and welfare.

These findings did not impose any requirements; however, the action was a prerequisite for implementing GHG emissions standards for vehicles and other sectors.[32] Subsequently these findings were used to modify existing Corporate Average Fuel Economy (CAFE) standards.

In March 2020, the U.S. Department of Transportation (USDOT) and the EPA issued the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, which further amended existing CAFE standards and tailpipe CO2 emissions standards for passenger cars and light trucks and established new standards covering model years 2021 through 2026.

Corporate Average Fuel Economy (CAFE) Standards

First enacted by Congress in 1975, the purpose of the Corporate Average Fuel Economy (CAFE) standards was to reduce energy consumption by increasing the fuel economy of passenger cars and light trucks. On April 1, 2010, the National Highway Traffic Safety Administration (NHTSA) and EPA issued a joint final rule establishing a new national program to regulate passenger cars and light trucks in order to improve fuel economy and reduce GHG emissions. In 2012, NHTSA established final passenger car and light truck CAFE standards for model years 2017-2021, which the agency projected would require an average combined fleet-wide fuel economy of 40.3-41.0 mpg in model year 2021. As part of the same rulemaking action the EPA issued GHG standards which were projected to require an average of 163 grams/mile of CO_2 in model year 2025. In March 2022 the NHTSA finalized CAFE Standards for model years 2024-2026 which 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% annually in 2024 and 2025, and 10% in 2026. Relative to model year 2021 average standards are increased nearly 10 miles per gallon.

[32] United States Environmental Protection Agency, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, Accessed February 13, 2023 at: https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 addressed the reduction of national GHG emissions by requiring mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022; creating and revising standards for regional efficiency for heating and cooling products, energy conservation, energy efficiency labeling for consumer electronic products and other standards; required greater efficiency for light bulbs by phasing out incandescent light bulbs and requiring new efficiency standards; and required energy savings in government and public institutions and various programs for research in alternative energy and other programs.

Federal Regulation of Power Plant Carbon Emissions

In 2015, the EPA promulgated the Clean Power Plan rule which addressed carbon dioxide emissions from existing coal- and natural-gas-fired power plants. For authority, the Agency cited Section 111 of the CAA, which, although known as the *New* Source Performance Standards program also authorized regulation of certain pollutants from *existing* sources. The Clean Power Plan was immediately challenged in the courts and in 2016 the Supreme Court stayed enforcement of the plan. In 2019 the EPA under the Trump administration repealed the Clean Power Plan and replaced it with the Affordable Clean Energy rule. On January 19, 2021 the federal D.C. Circuit Court ruled the Affordable Clean Energy rule violated the CAA, and the rule was vacated. The basis for the ruling concurrently vacated the EPA's repeal of the Clean Power Plan, though it did not reinstate the rule. The EPA under the Biden administration indicted in a memorandum dated February 12, 2021 that as a practical matter the administration would not seek to reinstate the Clean Power Plan. Subsequently, in West Virginia v. EPA, 2022, the Supreme Court ruled that Congress would need to explicitly give authority to the EPA to regulate emissions from existing power plants, as the Clean Power Plan sought to do, and found that Congress had not done so, and therefore invalidated that aspect of the Clean Power Plan.

The Inflation Reduction Act (IRA), signed into law August 16, 2022, explicitly defined GHGs- carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride- as air pollutants under the Clean Air Act. However, the bill only gives the EPA the explicitly authority to regulate GHGs within seven new sections added to the Clean Air Act and therefore does not directly address the West Virginia v. EPA ruling. The IRA aims to reduce GHG emissions to 40% below 2005 levels by 2030 primarily through the use of incentives and investments in clean energy. There is currently no replacement to the Clean Power Plan.

Construction Equipment Emission Standards

The EPA sets emission standards for construction equipment. Tier 1 standards were adopted in 1994 for new nonroad diesel engines over 50 hp, to be phased-in from 1996 to 2000. In 1998 Tier 1 standards were then applied to all equipment under 350 hp. Tier 2 and Tier 3 standards for all equipment were then introduced with phase-in schedules from 2000 to 2008. The Tier 1-3 standards are met through advanced engine design, meaning emission reductions generally cannot be obtained through the use of exhaust gas aftertreatment.

In 2004 EPA signed the final rule introducing Tier 4 emission standards, which are phased-in over the period of 2008-2015. The Tier 4 standards require that emissions of PM and NOx be further reduced from existing standards by about 90%. Tier 4 emission reductions can be achieved through the use of control technologies, including exhaust gas aftertreatment. Tier 4 standards also included reductions in sulfur content in nonroad diesel fuels, which was not present in previous standards.

These standards cover mobile *nonroad diesel engines* of all sizes, the sort of equipment used in construction, agricultural and industrial uses. Tier 1 standards were phased-in from 1996 to 2000, Tier 2 from 2001 to 2006, and Tier 3 standards were phased-in from 2006 to 2008. Equipment must meet the standards in place when they were built. However, rules governing the replacement or modification of equipment are geared toward retiring older equipment.

State

Senate Bill 1078 and Senate Bill 107, The California Renewables Portfolio Standard

The State enacted Senate Bill (SB) 1078 in 2002, establishing the Renewable Portfolio Standards (RPS) program and requiring retail sellers of electricity, including electrical corporations, community choice aggregators, and electric service providers, to purchase a specified minimum percentage of electricity generated by eligible renewable energy resources such as wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. The legislation set a target by which 20 percent of the State's electricity would be generated by renewable sources. Senate Bill 1078 requires each electrical corporation to increase its total procurement of eligible renewable energy resources by at least one percent per year so that 20 percent of its retail sales are procured from eligible renewable energy resources. If an electrical corporation fails to meet an annual target, it would be required to procure additional eligible renewable resources in subsequent years to compensate for the shortfall. The State enacted SB 107 in 2006, which modified the RPS to require that at least 20 percent of electricity retail sales be served by renewable energy resources by 2010.[33]

Assembly Bill 1493, The Pavley Standards

In July 2002, the State enacted Assembly Bill (AB) 1493, which directed the CARB to develop and adopt regulations that achieve the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks, beginning with model year 2009. In September 2004, pursuant to this directive, the CARB approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. These regulations created what are referred to as the Pavley Standards. In September 2009, the CARB adopted amendments to the Pavley Standards to reduce GHG emissions from new motor vehicles through the 2016 model year. These regulations created what are referred to as the Pavley II Standards. It is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 34 percent below 2016 levels by 2025, as well as improve fuel efficiency and reduce motorists' costs.[34]

Executive Order S-3-05

Former Governor Schwarzenegger's 2005 Executive Order S-3-05 included the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels. To meet the targets, the Governor directed several State agencies to cooperate in the development of a CAP. The Secretary of the California Environmental Protection Agency (Cal EPA) leads the Climate Action Team (CAT), whose goal is to implement global warming emission reduction programs identified in the CAP and to report biannually on the progress made toward meeting the emission reduction targets established in the Executive Order.[35]

[33] California Legislative Information, SB 107 (Simitian) Renewable energy: Public Interest Energy Research, Demonstration, and Development Program. Accessed at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=200520060SB107.

[34] California Air Resources Board (ARB), California Air Resources Board Approves Advances Clean Car Rules, Accessed on November 8, 2021 at: https://ww2.arb.ca.gov/news/california-air-resources-board-approves-advanced-clean-car-rules.

[35] Office of Governor Arnold Schwarzenegger, Executive Order S-3-05, June 1, 2005.

Assembly Bill 32, The Global Warming Solutions Act of 2006

In September 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as AB 32 (California Health and Safety Code, Section 38500 et seq.). As required by AB 32, CARB was directed to determine statewide GHG emissions in 1990, and set that as a limit to be achieved statewide by 2020. AB 32 mandated CARB to establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved.

By June 30, 2007, CARB was required to publish discrete early action GHG emission reduction measures that could be implemented. After the list was published, CARB had a deadline of January 1, 2010, to adopt regulations to implement these measures. Another deadline imposed on CARB required the approval of a "scoping plan" by January 1, 2009. The scoping plan was required to include recommendations for direct emission reduction measures, alternative compliance mechanisms, market-based compliance mechanisms, and potential monetary and nonmonetary incentives for sources and categories of sources that the ARB found necessary or desirable to facilitate the achievement of the maximum feasible and cost-effective reductions of GHGs by 2020. In developing the scoping plan, CARB was also required to identify opportunities for emission reductions measures from verifiable and enforceable voluntary actions, including, but not limited to, carbon sequestration projects and BMPs.[36]

Pursuant to AB 32, CARB identified 427 million MT CO_2e as the total Statewide aggregated 1990 GHG emissions level, which serves as the 2020 emissions limit. The CARB estimates that a GHG emissions reduction of 173 million MT CO_2e below business-as-usual (BAU) would be required to meet the Statewide emissions limit by year 2020.[37] Based on these numbers, CARB published a list of "early actions," adopted regulations implementing such actions, published a scoping plan and updates thereto, and enacted a series of implementing regulations.

Low Carbon Fuel Standard

Executive Order S-01-07 (January 18, 2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB. The Low Carbon Fuel Standard (LCFS) was identified by CARB as a Discrete Early Action item under AB 32, and the final resolution (09-31) was issued on April 23, 2009. In 2009, CARB approved for adoption the LCFS regulation, which became fully effective in April 2010 and is codified at Title 17, California Code of Regulations, Sections 95480-95490. The LCFS will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. In September 2018, the standards were amended by CARB to require a 20 percent reduction in carbon intensity by 2030, aligning with California's 2030 targets set by SB 32.

Senate Bill 375, the Sustainable Communities and Climate Protection Act

California's Sustainable Communities and Climate Protection Act, also referred to as Senate Bill 375 (SB 375) became effective January 1, 2009. The goal of SB 375 is to help achieve AB 32's GHG emissions reduction goals by aligning the planning processes for regional transportation, housing, and land use. SB 375 requires CARB to develop regional reduction targets for GHGs, and prompts the creation of regional plans to reduce emissions from vehicle use throughout the State. California's 18 Metropolitan Planning

[36] California Legislative Information, California Health and Safety Code, Section 38561, Accessed on November 8, 2021 at: http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=38561.&lawCode=HSC.

[37] California Air Resources Board, Staff Report, California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit, November 16, 2007.

Organizations (MPOs) have been tasked with creating "Sustainable Community Strategies" (SCS) in an effort to reduce the region's (VMT) in order to help meet AB 32 targets through integrated transportation, land use, housing and environmental planning. Pursuant to SB 375, CARB set per-capita GHG emissions reduction targets from passenger vehicles for each of the State's 18 MPOs. For the SCAG region, the targets are set at eight percent below 2005 per capita emissions levels by 2020 and 13 percent below 2005 per capita emissions levels by 2035. Beginning October 1, 2018, the target changed to 19 percent for 2035. This new target has been incorporated into SCAG's 2020-2045 Regional Transportation Plan / Sustainable Communities Plan (2020-2045 RTP/SCS), also referred to as the "Connect SoCal" Plan).[38]

Climate Change Scoping Plan

As required by AB 32, CARB was tasked with preparing a scoping plan that identified strategies for reducing GHG emissions. The first Climate Change Scoping Plan was adopted in December 2008 and gets updated every 5-years. So far there have been three updates on the Scoping Plan. Each update builds upon the existing strategies and recommendations from the previous plan and identifies opportunities to leverage existing and new funds.

The 2022 Climate Change Scoping Plan was finalized in December 2022 and is focused on the goal of obtaining carbon neutrality by 2045 or earlier. This is the first updated Scoping Plan that has added carbon neutrality as a science-based guide where it identifies technologically feasible, cost effective and equity-focused path to carbon net zero. The 2022 Scoping Plan specifically:[39]

- Identifies a path to reduce GHG emissions by 85 percent below 1990 emissions no later than 2045.
- Identifies technologically feasible, cost-effective means to achieve carbon neutrality by 2045.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as a driving principle throughout the document.
- Incorporates the contribution of natural and working lands to the state's GHG emissions, as well as its role in achieving carbon neutrality.
- Relies on the most up to date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration as well a direct air capture.

The Scoping Plan also includes Key Residential and Mixed-Use Project Attributes that Reduce GHGs in Appendix D that provides approaches for determining whether a proposed residential or mixed-use residential development would align with the State's climate goals, absent a locally or regionally adopted CEQA-qualified CAP.

Senate Bill X1-2

Established in 2002 under SB 1078 and accelerated in 2006 under SB 107 and again in 2011 under SB X1-2, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020.[40, 41] The

[38] SCAG, 2020-2045 RTP/SCS (Connect SoCal), adopted September 2020.
[39] California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality, November 16, 2022.
[40] Legislative Counsel of California, Senate Bill 1078, September 2002.
[41] Legislative Counsel of California, Senate Bill 1368, September 2006.

33 percent standard is consistent with the RPS goal established in the Scoping Plan. These mandates apply directly to investor-owned utilities. Based on the investor-owned utilities (IOU) Annual RPS Compliance Filings in August 2017, the three largest IOUs in the State surpassed this requirement.[42]

The Cap-and-Trade Program

The goal of the Cap-and-Trade Program, which appears in Sections 95800 to 96023 of Title 17 of the California Code of Regulations (CCR), is to reduce GHG emissions from major sources (covered entities) by setting a firm cap on Statewide GHG emissions while employing market mechanisms to cost-effectively achieve the emission-reduction goals. The Statewide cap for GHG emissions from major sources, which is measured in MT CO_2e, commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program's duration. Each covered entity will be required to surrender one permit to emit for each ton of GHG emissions they emit. Some covered entities will be allocated some allowances and will be able to buy additional allowances at auction, purchase allowances from others, or purchase offset credits. The Cap-and-Trade Program relies on data collected through the Mandatory Reporting of GHG Emissions Regulation to identify major sources of GHG emissions in California. Starting in 2012, major GHG-emitting sources, such as electricity generation and large stationary sources (including refineries, cement production facilities, oil and gas production facilities, glass manufacturing facilities, and food processing plants) that emit more than 25,000 MT CO_2e per year were required to comply with the Cap-and-Trade Program. The program expanded in 2015 to include fuel distributors (natural gas and propane fuel providers and transportation fuel providers) to address emissions from transportation fuels and from combustion of other fossil fuels not directly covered at large sources in the program's initial phase.[43]

The Advanced Clean Cars Program

In 2012, the CARB adopted the Advanced Clean Cars Program, which is aimed at reducing both smog-causing pollutants and GHG emissions from cars and light-duty trucks model years 2017-2025. The set of regulations focus on increasing the number of plug-in hybrid cars and zero-emission vehicles (ZEVs) in the vehicle fleet and on making fuels such as electricity and hydrogen readily available for these vehicle technologies. The components of the Advanced Clean Cars Program are the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the ZEV regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. The new standards will reduce GHG emissions by 34 percent in 2025.[44]

Executive Order B-16-12

In March 2012, Governor Brown issued Executive Order B-16-12, which embodied a vision of a future in which ZEV would help the State meet its GHG reduction targets. Executive Order B-16-12 directed the State government to accelerate the market for ZEVs in California through fleet replacement and electric vehicle infrastructure. The Executive Order set the following targets:

- By 2015, all major cities in California will have adequate infrastructure and be ZEV ready.
- By 2020, the State will have established adequate infrastructure to support one million ZEVs in California.

[42] California Public Utilities Commission, 2017 Annual Report: Renewable Portfolio Standard, November 2017 (at Table 1).
[43] California Air Resources Board, Cap-and-Trade Regulation Instructional Guidance, September 2012.
[44] California Air Resources Board, Facts About the Advanced Clean Cars Program, November 9, 2011.

- By 2025, there will be 1.5 million ZEVs on the road in California.
- By 2050, virtually all personal transportation in the State will be based on ZEVs, and GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels. [45]

Title 24 Building Energy Efficiency Standards

California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings, located at Title 24, Part 6 of the California Code of Regulations and commonly referred to as "Title 24," were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standards. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

The 2019 Standards, which took effect on January 1, 2020, improve upon the 2016 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The most significant efficiency improvements required by the 2019 Building Energy Efficiency Standards include the introduction of photovoltaic power systems requirements for residential uses, as well as improvements for attics, walls, water heating, and lighting. Title 24, Part 6 requires that local agencies determine compliance with the applicable Building Energy Efficiency Standards before issuing building permits for construction.

California Green Building Standards Code

The California Green Building Standards Code, which is Part 11 of Title 24 of the California Code of Regulations, is commonly referred to as the CALGreen Code. The 2019 CALGreen Code became effective on January 1, 2020, and is intended to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices" in the following categories:

1. Planning and design.
2. Energy efficiency.
3. Water efficiency and conservation.
4. Material conservation and resource efficiency.
5. Environmental air quality.

The 2019 CALGreen Code includes both voluntary and mandatory energy efficiency standards for commercial and residential buildings that address site selection, storm water management, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, and irrigation, as well as other topics. As part of Title 24, applicable CalGreen Code requirements are enforced through the building permit process.

Executive Orders B-30-15 and B-55-18

In 2015, Governor Brown issued Executive Order B-30-15, which created an interim Statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030. The interim standard was established to ensure that California would meet its target of reducing GHG emissions to 80

[45] Office of Governor Edmund G. Brown Jr. Executive Order B-16-2012.

percent below 1990 levels by 2050. This was followed by Governor Brown signing Executive Order B-55-18 in 2018 which established a state goal to achieve carbon neutrality no later than 2045.

Executive Order N-79-20

In 2020 Governor Gavin Newsom signed Executive Order N-79-20 calling for the elimination of internal combustion passenger vehicles by 2035.

Assembly Bill 1279, California Climate Crisis Act

Assembly Bill 1279, known as the California Climate Crisis Act, was enacted September 16, 2022. It codifies previous executive orders by requiring California to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. It also requires that statewide anthropogenic GHG emissions be reduced to at least 85 percent below 1990 levels by 2045.

Senate Bill 743

Governor Brown signed Senate Bill (SB) 743 in 2013, which creates a process to change the way that transportation impacts are analyzed under CEQA. SB 743 requires the Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service (LOS) methodology for evaluating transportation impacts. Particularly within areas served by transit. The required alternative methodology criteria must promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Measurements of transportation impacts would involve vehicle miles traveled (VMT) per capita or per employee.

Senate Bill 350

In 2015, the State enacted the Clean Energy and Pollution Reduction Act, or SB 350, which increases the State's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This would increase the use of RPS-eligible resources, including solar, wind, biomass, and geothermal sources, among others. In addition, SB 350 requires the State to double its energy efficiency savings in electricity and natural gas end uses by 2030. To help ensure that these goals are met and that GHG emission reductions are achieved, large utilities will be required to develop and submit Integrated Resource Plans (IRPs) that detail how each utility will meet their customers resource needs, reduce GHG emissions, and increase the deployment of clean energy resources.[46]

The "Newhall Ranch Case," Center for Biological Diversity v. California Department of Fish and Wildlife

On November 30, 2015, the California Supreme Court released its opinion on *Center for Biological Diversity v. California Department of Fish and Wildlife*, commonly referred to as the Newhall Ranch Case. Due to the importance of the Supreme Court as the top entity within the California Judiciary, and because of the relative lack of judicial guidance regarding how GHG issues should be addressed in CEQA documents, the opinion provides very important legal guidance to agencies charged with preparing EIRs and evaluating impacts related to GHG emissions.

The case involved a challenge to an EIR prepared by the California Department of Fish and Wildlife (CDFW) for the Newhall Ranch development project in Los Angeles County, which would consist of

[46] California Energy Commission, Clean Energy and Pollution Reduction Act, SB 350 Overview. Accessed December 19, 2022 at: https://www.energy.ca.gov/sb350/.

approximately 20,000 dwelling units, in addition to commercial and business uses, schools, golf courses, parks and other community facilities in the City of Santa Clarita.

In relation to GHG analyses, the Newhall Ranch Case illustrates the difficulty of complying with Statewide GHG reduction targets at the local level using CEQA to determine whether an individual project's GHG emissions will create a significant environmental impact triggering an EIR, mitigation, and/or statement of overriding consideration.[47] The EIR utilized compliance with AB 32's GHG reduction goals as a threshold of significance and modeled its analysis on the CARB's BAU emissions projections from the 2008 Scoping Plan. The EIR quantified the project's annual emissions at buildout and projected emissions in 2020 under a BAU scenario, in which no additional regulatory actions were taken to reduce emissions. Since the Scoping Plan determined that a reduction of 29 percent from BAU was needed to meet AB 32's 2020 reduction goal, the EIR concluded that the project would have a less than significant impact, because the project's annual GHG emissions were projected to be 31 percent below its BAU estimate.

The Supreme Court concluded that the threshold of significance used by the EIR was permissible; however, the BAU analysis lacked substantial evidence to demonstrate that the required percentage reduction from BAU is the same for an individual project as for the entire State. The Court expressed skepticism that a percentage reduction goal applicable to the State as a whole would apply without change to an individual development project, regardless of its size or location. Therefore, the Court determined that the EIRs' GHG analysis was not sufficient to support the conclusion that GHG impacts would be less than significant.

The Supreme Court provided the following guidance regarding potential alternative approaches to GHG impact assessments at the project level for lead agencies:

- The lead agency determination of what level of GHG emission reduction from BAU projection that a new land development at the proposed location would need to achieve to comply with statewide goals upon examination of data behind the Scoping Plan's BAU emission projections. The lead agency must provide substantial evidence and account for the disconnect between the Scoping Plan, which dealt with the State as a whole, and an analysis of an individual project's land use emissions.
- The lead agency may use a project's compliance with performance based standards, such as high building efficiency, adopted to fulfill a Statewide plan to reduce or mitigate GHG emissions to assess consistency with AB 32 to the extent that the project features comply with or exceed the regulation. A significance analysis would then need to account for the additional GHG emissions, such as transportation emissions, beyond the regulated activity. Transportation emissions are in part a function of the location, size, and density or intensity of a project, and thus can be affected by local governments' land use decision making. Additionally, the lead agency may use a programmatic effort including a general plan, long range development plan, or a separate plan to reduce GHG emissions (such as a CAP or a SB 375 metropolitan regional transportation impact SCS) that accounts for specific geographical GHG emission reductions to streamline or tier project level CEQA analysis pursuant to CEQA Guidelines Section 15183.5(a) through (b) for land use and PRC Section 21155.2 and 21159.28 and CEQA Guidelines Section 15183.5(c) for transportation.

[47] Kaatz, Joe, Energy Policy Initiative Center, University of San Diego, *Center for Biological Diversity et al., v. California Department of Fish and Wildlife*, and the Newhall Land and Farming Company: the Burden of CEQA Land Use GHG Emission Reduction Analysis at the Local Level. January 20, 2016, Accessed at: https://epicenergyblog.com/2016/01/20/center-for-biological-diversity-et-al-v-california-department-of-fish-and-wildlife-and-the-newhall-land-and-farming-company-the-burden-of-ceqa-land-use-ghg-emission-reduction-analysis-at-the-loca/.

- The lead agency may rely on existing numerical thresholds of significance for GHG emissions (such as the BAAQMD's proposed threshold of significance of 1,100 MT CO_2E in annual emission for CEQA GHG emission analysis on new land use projects). The use of a numerical value provides what is "normally" considered significant but does not relieve a lead agency from independently determining the significance of the impact for the individual project (CEQA Guidelines Section 15064.7).[48]

Senate Bill 32

Effective January 1, 2017, SB 32 added Section 38566 to the California Health and Safety Code, requiring Statewide GHG emissions reductions to 40 percent below those that occurred in 1990 by the year 2030.[49] As outlined in SB 32, achieving the required reductions involves increasing renewable energy use, imposing tighter limits on carbon content of gasoline and diesel fuel, increasing use of electric vehicles (EVs), improving energy efficiency, and reducing emissions from key industries.

Executive Order B-55-18

Executive Order B-55-18, issued by Governor Brown on September 10, 2018, established an additional statewide policy goal to achieve carbon neutrality as soon as possible and no later than 2045, and to achieve and maintain net negative emissions thereafter. The Order states that this new goal is in addition to the prior statewide targets for reduction of GHG emissions.

Senate Bill 100

On September 10, 2018, Governor Jerry Brown signed SB 100, which further increased California's RPS and requires retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, and that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045.

Regional

SCAG Regional Transportation Plan/Sustainable Communities Strategy

SCAG functions as the MPO for six counties, including Los Angeles County, wherein the project Site is located. As the designated MPO, SCAG is required by federal law to prepare and update a long-range regional transportation plan, keep up with CAA requirements, monitor system performance, and develop a sustainable communities strategy to achieve GHG reduction targets set by the CARB.

On September 1, 2020, SCAG's Regional Council adopted an updated RTP/SCS known as the 2020-2045 RTP/SCS, or Connect SoCal.[50] The 2020-2045 RTP/SCS is a long-range visioning plan that builds upon and expands land use and transportation strategies of the 2016-2040 RTP/SCS to increase mobility options and achieve a more sustainable growth pattern. projects growth in employment, population, and households

[48] Kaatz, Joe, Energy Policy Initiative Center, University of San Diego, *Center for Biological Diversity et al., v. California Department of Fish and Wildlife*, and the Newhall Land and Farming Company: the Burden of CEQA Land Use GHG Emission Reduction Analysis at the Local Level. January 20, 2016, Accessed at: https://epicenergyblog.com/2016/01/20/center-for-biological-diversity-et-al-v-california-department-of-fish-and-wildlife-and-the-newhall-land-and-farming-company-the-burden-of-ceqa-land-use-ghg-emission-reduction-analysis-at-the-loca/.

[49] California Legislative Information, Senate Bill No. 32, Accessed at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32.

[50] Southern California Association of Governments, 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, Adopted September 3, 2020.

at the regional, county, city, town and neighborhood levels. These projections take into account economic and demographic trends, as well feedback from SCAG's jurisdictions. The 2020-2045 RTP/SCS "Core Vision" centers on maintaining and better managing the transportation network for moving people and goods, while expanding mobility choices by locating housing, jobs and transit closer together and increasing investment in transit and complete streets.[51] The 2020-2045 RTP/SCS continues efforts to better align transportation investments and land use decisions to improve mobility and reduce GHGs by bringing housing, jobs and transit closer together. SCAG has determined that the 2020-2045 RTP/SCS would achieve the applicable GHG emissions reduction target for automobiles and light trucks of 19 percent per capita reduction by 2035, relative to 2005 levels, as established by CARB for the region.[52]

Local

The City's General Plan Conservation Element 2013 Update includes the following climate change policy:

CO-39 Support efforts to reduce greenhouse gas emissions, consistent with the intent of the State of California's California Global Warming Solutions Act of 2006 (Assembly Bill 32).

Implementation Measures:

- Prepare Greenhouse Gas Analyses for development projects which require the preparation of Environmental Impact Reports or Mitigated Negative Declarations.
- Reduce energy use and utilize sustainable energy sources at City facilities where feasible, in accordance with City-adopted Energy Action Plan.

Although the City does not have an adopted Climate Action Plan (CAP), the City is now developing its Climate and Environmental Action Plan (CEAP), which will detail the strategies and actions that the City will pursue to protect the environment and address the challenges of climate change. The CEAP is being developed in parallel with the City's General Plan update.

8.0 GREENHOUSE GAS EMISSIONS IMPACT

Thresholds of Significance

Based on the CEQA Appendix G guidelines, a project would have a potentially significant GHG impact if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy or regulation adopted to reduce GHG emissions.

Because individual projects do not generate sufficient GHG emissions that would substantially affect climate change; the issue of climate change typically involves an analysis of whether a project's contribution toward an impact is cumulatively considerable. As defined by the California Environmental Quality Act (CEQA Guidelines) Section 15355, "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects.

[51] Southern California Association of Governments, A Plan Summary for Connect SoCal, Adopted September 3, 2020.
[52] California Air Resources Board, Executive Order G-20-239 Southern California Association of Governments' (SCAG) 2020 Sustainable Communities Strategy CARB Acceptance of GHG Quantification Determination, October 30, 2020.

The CEQA Guidelines Section 15064.4(a) states that a lead agency shall have discretion to determine, in the context of a particular project, whether to:

1) Quantify greenhouse gas emissions resulting from a project; and/or
2) Rely on a qualitative analysis or performance based standards.

Additionally, the Section 15064.4(b) states that "In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change," and that the following factors should be considered:

1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

CEQA Guidelines Section 15064.4 does not establish a threshold of significance for GHG emissions. Lead agencies have the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies or suggested by other experts (see CEQA Guidelines Section 15064.7(c)). Pursuant to CEQA Guidelines Section 15064.7(b), "Thresholds of significance to be adopted for general use as part of the lead agency's environmental review process must be adopted by ordinance, resolution, rule, or regulation, and developed through a public review process and be supported by substantial evidence." To date, the City, as lead agency, has not established a quantitative threshold for evaluating the significance of GHG emissions for general use as part of the City's environmental review process.

In 2011, VCAPCD staff provided a report entitled "Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County" to the Ventura County Air Pollution Control Board by way of a letter dated November 8, 2011. This letter notes that the most common approach for determining the significance of GHG emissions for land use projects is a tiered approach involving: (1) applicability of any CEQA exemptions; (2) project consistency with a local climate action plan; and (3) application of an efficiency-based threshold and/or a bright line gap-based threshold based on capturing 90 percent of project GHG emissions. This passage refers to and cites sections from a 2008 CAPCOA white paper titled CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act[53] that provides "a common platform of information and tools to address climate change in CEQA analyses,

[53] CAPCOA, CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act, January 2008.

including the evaluation and mitigation of GHG emissions from proposed projects and identifying significance threshold options." The VCAPCD letter also states that "Given that Ventura County is adjacent to the South Coast AQMD jurisdiction and a part of the Southern California Association of Governments region, District staff believes it makes sense to set local GHG emission thresholds of significance for land use development projects at levels consistent with those set by the South Coast AQMD," and concludes that "unless directed otherwise by [the Air Pollution Control] Board, District staff will continue to evaluate and develop suitable GHG threshold options for Ventura County with preference for GHG threshold consistency with the South Coast AQMD and the SCAG region." However, to date, VCAPCD has not established quantitative significance thresholds for evaluating GHG emissions in CEQA analyses for non-industrial development projects.

In 2008 SCAQMD staff suggested a screening threshold of 3,000 MTCO2e/year for residential, commercial, and mixed-use projects in the Interim CEQA Greenhouse Gas (GHG) Significance Threshold Draft Guidance Document. Since that time the SCAQMD has explored other options but no screening thresholds for residential or mixed-use projects have yet been adopted by SCAQMD or any other applicable local, regional, or State agency. As such, for this analysis, the potential significance of the project's GHG emissions will be qualitatively evaluated based on the "extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions" (CEQA Guidelines Section 15064.4(b)). The project would be required by the City to comply with applicable regulations or requirements adopted to implement statewide, regional, or local plans for the reduction or mitigation of greenhouse gas emissions. The project's consistency with such plans is discussed in the Plan Consistency evaluation provided below.

Project GHG Emissions

As discussed above, no State, regional, or local agency with jurisdiction of the project site has adopted a numeric threshold for determining the potential significance of GHG emissions that would be applicable to the proposed project. However, pursuant to CEQA Guidelines Section 15064.4(a), which states that "A lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project," the project's estimated annual GHG emissions were calculated using CalEEMod 2020.4.0, which are presented for reference and can be compared to the suggested 3,000 MTCO2e/year threshold.

Construction GHG Emissions Methodology and Analysis

During construction, the project would generate GHG emissions primarily from the use of internal combustion engines to power onsite equipment as well as offsite transportation of workers and materials. The project's total construction activity emissions were modeled using CalEEMod Version 2020.4.0 using the same project-specific data inputs and design features used to model daily emissions of criteria pollutants discussed above. The project's estimated GHG emissions are shown in the CalEEMod output sheets for Annual emissions provided in Appendix A.

As estimated using CalEEMod 2020.4.0, the project's construction activities would generate a total of approximately 2,396 MT CO_2e emissions. As construction emissions occur for a limited period of a project's lifetime, as a standard practice, GHG emissions from construction are amortized over a presumed project lifetime. A project lifetime of 30 years is recommended by SCAQMD for amortizing construction-related GHG emissions.[54] The proposed project's amortized construction-related emissions would therefore

[54] SCAQMD, Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, October 2008. The VCAPCD does not specify a presumed lifetime for development projects in the County.

be 79.9 MT CO_2e. The amortized construction emissions have been added to the project's annual operational GHG emissions as shown in the following discussion.

Operational GHG Emissions Methodology and Analysis

During operations, the project would generate GHG emissions from area sources, energy use, mobile, water use, and waste disposal. Annual emissions from these sources were estimated using CalEEMod Version 2020.4.0 using the same project-specific data and inputs used to model daily emissions of criteria pollutants discussed above. The project's estimated GHG emissions are shown in the CalEEMod output sheets for Annual emissions provided in Appendix A.

Area sources include emissions from consumer product use (i.e., cleaning supplies, kitchen aerosols, cosmetics and toiletries), architectural coatings such as paints (averaged on an annual basis assuming all surface areas are repainted once every 10 years), and landscape maintenance equipment (i.e., lawn mowers, leaf blowers, etc.). Energy sources include electricity and natural gas use. Electricity uses include operation of equipment for space heating/cooling, water heating, and ventilation, as well as appliances, electronics, other miscellaneous plug-in uses, and lighting. Natural gas usage includes building heating, water heating, cooking, and pool/spa heating. However, the project will not include gas appliances in the residential units.

Mobile sources include on-road motor vehicle use by residents, customers, guests, etc. Vehicle emission factors used in CalEEMod are based on EMFAC2017. Beginning with CalEEMod Version 2020.4.0 (used for this analysis), N_2O emissions from vehicles are included in CalEEMod as EMFAC2017 includes vehicle N_2O emissions. The number of trips generated by the project as well as the CalEEMod default vehicle fleet mix were used to calculate the CO_2e emissions associated with on-road motor vehicle use.

Project-specific operations data used in the model as reported in the attached CalEEMod output sheets (Appendix A) include:

- VCAPCD Rule 74.2 limiting architectural coatings applied for residential and commercial use structures to 50 g/L VOC content.
- Hill Canyon Wastewater Treatment Plant details.
- 1,788 average daily trips per the project's Traffic, Circulation and Vehicle Miles Traveled (VMT) Study (Traffic Study).[55]

No adjustments were made in the CalEEMod that account for how the project would increase the density of use within the infill site, would be adjacent to and near commercial uses and employment centers (destination accessibility), will include below market rate housing, and provides a co-work amenity space to encourage telecommuting/alternate work schedules. Also, no adjustments were made in CalEEMod regarding reduced water use due to requirements to provide high efficiency plumbing fixtures to promote water conservation. Additionally, the project would not include natural gas appliances in the proposed residences, would provide EV facilities onsite (parking spaces that are EV-capable or EV-ready, as well as spaces with EV charging equipment installed), and bicycle storage rooms equipped with electric bike chargers. These features would further reduce potential operational emissions below those calculated by CalEEMod. As such, the estimated operational emissions calculated by CalEEMod are conservatively high, and actual operational emissions would be lower as a result of reductions that would occur due to features of the project site, surroundings, and proposed development.

[55] Stantec, 2150 Hillcrest Drive Traffic, Circulation and Vehicle Miles Traveled (VMT) Study, March 23, 2023.

Table 9, Annual Greenhouse Gas Emissions, summarizes the estimated operational emissions as well as the amortized construction emissions based on the CalEEMod output files provided in Appendix A of this report. The estimated GHG emissions shown in Table 9 represent a conservative evaluation as further reductions that would result from project features that would reduce energy and water use, encourage use of EVs or electric bicycles (e-bikes), or other transportation demand management (TDM) measures which may be required by the City as conditions of approval through the land use entitlement process have not been quantified. Additionally, as future tenants or employees of the project currently generate GHG emissions where they currently reside and/or are employed which cannot be known, the proposed project's estimated emissions shown in Table 9 conservatively do not reflect the net change in global, state, or regional GHG emissions that would result from the project.

Table 9
Annual Greenhouse Gas Emissions

Generation Source	MT CO_2e/year
Project Emissions	
Area Sources	4.1
Energy Utilization	630.9
Mobile Source [a]	1,387.3
Solid Waste Generation	79.8
Water Consumption	92.4
Construction (Amortized)	79.9
Total Project Operational Emissions	**2,274.4**

Source: CalEEMod output March 30, 2023. (Appendix A)
[a] CalEEMod Version 2020.4.0 includes N_2O emissions from vehicles.
Note: Totals may differ due to rounding.

The project's estimated emissions shown in Table 9 are provided pursuant to CEQA Guidelines Section 15064.4(a) for informational and disclosure purposes. As mentioned, a 3,000 MTCO2e/year threshold for operational emissions was suggested by SCAQMD staff in 2008, but no numeric threshold for determining the potential significance of GHG emissions, such as a mass emissions rate (bright line threshold), per capita emissions rate (efficiency threshold), or emissions reduction percentage below an unmitigated rate (performance threshold) to be generated by a mixed-use project with residential and commercial uses has been adopted by the City, the VCAPCD, the SCAQMD, nor any other State, regional, or local agency with jurisdiction of the project site. As such, there are no applicable numeric standards for determining if the project's estimated emissions shown in Table 9 would cause a cumulatively considerable contribution to an environmental impact under CEQA. Therefore, in accordance with CEQA Guidelines Section 15064.4(b)(3), the determination of the significance of the project's GHG emissions impact is based on a qualitative analysis considering the project's consistency with applicable statewide, regional, and local plans adopted for the purpose of reducing GHG emissions as discussed below under Plan Consistency.

Plan Consistency

The project proposes an in-fill development within an urbanized portion of the City on a site that is surrounded by existing uses, is accessed by existing streets, and is served by existing utilities. The proposed project would replace a vacant office building with a new mixed-use development within the City that would be adjacent to, or in close proximity to existing commercial uses and major employment center with office and light industrial uses such as Amgen. The site location is accessible to existing transit with bus stops for two Thousand Oaks Transit routes located within approximately 0.1 mile to the east and west.

The project would provide co-working space as an amenity to facilitate teleworking by residents. Additionally, the project would provide commercial use space, and would include courtyards and indoor recreation amenities such as a fitness room. These features would allow residents to live, work, shop, and recreate without driving to an alternative location. The project would also incorporate EV and e-bike charging facilities to encourage use of electric powered vehicles and bicycles for transportation. Beyond required compliance with California Code of Regulations Building Energy Efficiency Standards (Title 24, Part 6), and California Green Building Standards Code (Title 24, Part 11) that require energy efficient buildings and appliances, water use conservation, and rooftop solar PV panels, which would reduce GHG emissions.

The City is developing a CAP as part of the General Plan update process. However, to date the City has not adopted a local CAP or other GHG reduction plan that addresses community-wide emissions that would meet the criteria of the CEQA Guidelines Section 15183.5(b). As such, to demonstrate the extent to which the project complies with such plans, this evaluation provides an analysis of the project's consistency with the following plans that have been adopted on a regional and statewide scale, which include policies that would have the effect of reducing GHG emissions.

SCAG RTP/SCS

The SCAG 2020–2045 RTP/SCS, adopted September 3, 2020, is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The RTP/SCS plans to accommodate future growth through intensification of residential and commercial land uses in urban areas to reduce VMT, which would reduce emissions of GHGs in the transportation sector, the largest contributing sector to statewide GHG emissions. Although the RTP/SCS strategies are directed at agencies and are not directly applicable to individual development projects, **Table 10, Project Consistency with SCAG RTP/SCS Strategies**, lists relevant strategies identified in the SCAG 2020-2045 RTP/SCS that are intended to help achieve the State-mandated GHG emissions reduction targets and provides a discussion of how the project helps achieve the goals of these strategies.

Table 10
Project Consistency with SCAG RTP/SCS Strategies

Connect SoCal Strategies	Consistency Analysis
Focus Growth Near Destinations & Mobility Options • Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations • Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets • Plan for growth near transit investments and support implementation of first/last mile strategies • Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses • Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods • Encourage design and transportation options that	**No Conflict.** The project site is located near existing transit facilities, including bus stops for two Thousand Oaks Transit Routes located within approximately 0.10 mile of the site. The project would construct a mixed-use development adjacent to an industrial/office job center and would provide onsite employment opportunities near transit as well as the residential uses on the site and in the surrounding vicinity. The project would also include amenity co-working space to facilitate remote work for residents to reduce commuting, and would redevelop an underutilized infill site, replacing a vacant office building and parking lot. New housing units would be provided by the project, accommodating new growth and increasing amenities and connectivity within existing neighborhoods. Bicycle parking facilities with e-bike charging stations will be provided, which in combination with existing Class II bike lanes located along Hillcrest Drive and Rancho Conejo Boulevard (north of Hillcrest

Connect SoCal Strategies	Consistency Analysis
reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations) • Identify way to "right size" parking requirements and promote alternative parking strategies (e.g., shared parking or smart parking)	Drive) would support implementation of first/last mile strategies. As a mixed-use development providing residential and commercial uses in proximity to existing transit, shopping, dining, and employment opportunities, the project has been designed to reduce reliance on solo vehicle trips.
Promote Diverse Housing Choices • Preserve and rehabilitate affordable housing and prevent displacement • Identify funding opportunities for new workforce and affordable housing development • Create incentives and reduce regulatory barriers for building context-sensitive accessory dwelling units to increase housing supply • Provide support to local jurisdictions to streamline and lessen barriers to housing development that supports reduction of GHG emissions	**No Conflict.** The project would not eliminate existing housing, nor would it displace residents. The project would provide diverse housing choices by including residential apartment units consisting of one-bedroom, two-bedroom, and three-bedroom units. The project would also include 12% very low income units (30 affordable units). The project would not impede SCAG's ability to provide funding opportunities for new workforce and affordable housing development or to create incentives and reduce regulatory barriers for building accessory dwelling units or other housing.
Leverage Technology Innovations • Promote low emission technologies such as neighborhood EVs, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space • Improve access to services through technology – such as telework and telemedicine as well as other incentives such as a "mobility wallet," an app-based system for storing transit and other multi-modal payments • Identify ways to incorporate "micro-power grids" in communities, for example solar energy, hydrogen fuel cell power storage and power generation	**No Conflict.** The project would be consistent with these strategies by providing EV chargers, EV-ready parking spaces, and EV-capable parking spaces to meet or exceed CALGreen requirements. The project would also provide indoor/outdoor bicycle parking with electric bike charging stations, and the project would an amenity/co-working space to facilitate telework and work from home uses. Although providing a community micro-power grid is not within the purview of the proposed project, it would provide rooftop solar panels to code that would supplement electricity supplies for the project.
Support Implementation of Sustainability Policies • Pursue funding opportunities to support local sustainable development implementation projects that reduce GHG emissions • Support statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations • Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts, Community Revitalization and Investment Authorities, or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space • Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies • Enhance partnerships with other planning	**No Conflict.** The funding, support, and implementation of these sustainability policies and strategies is the responsibility of SCAG. Nevertheless, the project supports these sustainable development policies and strategies by providing a mixed-use, urban infill development in proximity to bus stops, an industrial/office job center including Amgen facilities, shopping and dining opportunities, indoor/outdoor bicycle storage with e-bike charging stations, amenity/co-working spaces, rooftop solar panels, and EV chargers, EV-ready, and EV-capable parking spaces to meet or exceed CALGreen standards as sustainability features.

Connect SoCal Strategies	Consistency Analysis
organizations to promote resources and best practices in the SCAG region • Continue to support long range planning efforts by local jurisdictions • Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy	
Promote a Green Region • Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards • Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration • Integrate local food production into the regional landscape • Promote more resource efficient development focused on conservation, recycling and reclamation • Preserve, enhance and restore regional wildlife connectivity • Reduce consumption of resource areas, including agricultural land • Identify ways to improve access to public park space	**No Conflict.** The project would redevelop an infill property currently occupied by a vacant office building and an asphalt parking lot with remnant landscaping planter islands which would be removed by the project. New landscaping would be onsite to reduce urban heat island effects relative to existing conditions while also providing carbon sequestration. The project would install rooftop solar panels as required by code to support policies for renewable energy production. The project would be designed to meet or exceed Title 24 Building Energy Efficiency Standards and Green Building Standards. The project would include open space areas for resident use would not remove any existing park space, agricultural land, or other open spaces.
Source: Southern California Association of Governments, Connect SoCal (The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments), September 3, 2020.	

Climate Change Scoping Plan

In 2008, the CARB adopted the Climate Change Scoping Plan: A Framework for Change (Scoping Plan), which established an overall framework for measures to reduce statewide GHG emissions for various sources/sectors to 1990 levels by 2020, consistent with the reduction targets of Assembly Bill 32 (AB 32). The Scoping Plan was updated in 2014, 2017, and most recently in 2022. The 2022 update to the Scoping Plan proposes CARB's strategy to achieve targets for carbon neutrality and reduce anthropogenic greenhouse gas (GHG) emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279. The Scoping Plan Scenario is embodied in Table 2-1 of the Plan, titled Actions for the Scoping Plan Scenario: AB 32 GHG Inventory sectors. This table delineates what actions are being taken to address GHG emission reductions in each sector addressed by the Plan. The identified Actions are not applicable at the individual development project level as they represent targets and regulations that the State is undertaking and regional and local agencies must address in their capacity through compliance or the adoption of specific regulation. On a technical basis, an individual development project at the local level can neither be in or out of compliance with the Actions as a private development project has no authority to implement the actions. Therefore, it is not necessary, nor technically possible, to demonstrate compliance with these Actions. However, as the project must comply with all applicable regulations in place throughout the various stages of approval, including the plan check phase which dictates construction and operational characteristics, it can be reasonably concluded the project would not conflict with any of the identified Actions.

Applicable at the project level, as the local jurisdiction currently does not have a CEQA-qualified CAP, are the Key Residential and Mixed-Use Project Attributes that Reduce GHGs found in Table 3 of Appendix D of the Scoping Plan. CARB states that mixed-use development projects that incorporate all of the key project attributes can be determined to be consistent with the Scoping Plan and other applicable policies, and GHG emissions associated with such projects may result in a less-than-significant GHG impact under CEQA. Consistency with these attributes is demonstrated in **Table 11, 2022 Scoping Plan Residential and Mixed-Use Project Attributes Consistency.**

Table 11
2022 Scoping Plan Residential and Mixed-Use Project Attributes Consistency

Priority Areas	Key Project Attribute	Project Consistency
Transportation Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval.	**Consistent.** Per compliance with CALGreen code the project will provide: 226 EV Capable parking spaces (40% of overall Parking) with pre-wiring installed for future Level 2 EV Charging (10% required per CALGreen). 141 EV Ready parking spaces (25% of overall Parking) equipped with low power Level 2 EV charging 120-240 volt 30 Amp receptacles (25% required per CALGreen) 57 EV Chargers (10% of Overall Parking) equipped with Level 2 EVSE Supply Equipment (5% required per CALGreen) available at initial occupancy. Indoor/Outdoor bike parking with electric bicycle charging stations
VMT Reduction	Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer)	**Consistent.** The project would construct a mixed-use residential development on an infill site replacing a vacant office building and a large parking lot that currently covers the majority of the property.
	Does not result in the loss or conversion of natural and working lands	**Consistent.** The project site is currently occupied by a vacant office building and a large parking lot. There are no natural or working lands within the confines of the project site.
	Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or Is in proximity to existing transit stops (within a half mile), or Satisfies more detailed and stringent criteria specified in the region's SCS	**Consistent.** With 333 units on 8.19 net acres, the project has a density of 40.6 dwelling units per acre.

Priority Areas	Key Project Attribute	Project Consistency
	Reduces parking requirements by: Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	**Consistent.** Parking spaces will not be assigned to units, residents will have the option to rent parking for an additional cost.
	At least 20 percent of units included are affordable to lower-income residents	**Reasonably consistent.** The project will have 30 units, 9 % of total units, income-restricted for very low income tenants. The very low income level includes those earning 30% to 50% of the local area median income. The Density Bonus Law (California Government Code Sections 65915 – 65918) provides density bonuses and incentives to housing projects that provide income-restricted units. The most basic means of qualifying is by providing either 5% of units to very low income residents, or 10% of units to lower income residents. It only takes half as many very low income units to qualify as lower income units because very low income units are a greater cost burden to the project. The 9% of units set aside in the project considered in the context of the Density Bonus Law then would represent a similar cost burden as 18% lower income units. Regardless, a 20% set-aside of units for a private development is the upper end of what a private development can achieve without subsidies. The units must be income-restricted for 55 years, and any associated shortfalls must be accounted for in the rates of other units, which may or may not be feasible within the market. As such this attribute should be considered as a target goal rather than a bright line threshold, and the project's set-aside for 30 very low income units will be a substantial increase in income-restricted units within the City.
	Results in no net loss of existing affordable units	**Consistent.** No residential units are being removed from the project site.

Priority Areas	Key Project Attribute	Project Consistency
Building Decarbonization	Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking	**Consistent.** Residential units will not be equipped with gas appliances or gas connections.
Source: CARB 2022 Scoping Plan, Appendix D, Table 3, November 2022.		

GHG CEQA Conclusion

In the absence of an adopted quantitative threshold for determining the potential significance of GHG emissions that would be applicable to the project, in accordance with CEQA Guidelines Section 15064.4(b)(3), the determination of the significance of the project's GHG emissions impact is based on a qualitative analysis considering the project's consistency with applicable statewide, regional, and local plans adopted for the purpose of reducing GHG emissions**.** The project would be required to comply with applicable regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions including solar panel and EV parking space provision as well as energy conservation standards of Title 24 Building Energy Efficiency Standards (Part 6) and Green Building Standards (Part 11). The project would also be designed to meet or exceed "green" building standards including energy efficiency. As shown in Table 10, the project furthers the goals of the 2020-2045 RTP/SCS, the implementation of which CARB has stated would achieve the per capita reduction by 2035, relative to 2005 levels, as established by CARB for the region.[56] The project also would be consistent with the applicable policies of the 2022 Scoping Plan Update as shown in Tables 11. Therefore, based on the CEQA Guidelines for determining the significance of GHG emissions, the currently available adopted plans for reducing GHG emissions applicable to the project, and the absence of applicable adopted quantitative significance thresholds, potential impacts would be less than significant.

[56] California Air Resources Board, Executive Order G-20-239 Southern California Association of Governments' (SCAG) 2020 Sustainable Communities Strategy CARB Acceptance of GHG Quantification Determination, October 30, 2020.

APPENDIX A

CalEEMod Version 2020.4.0
Computer Model Output

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

Latigo Hillcrest Mixed Use Project

Ventura County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	462.00	Space	0.00	195,874.00	0
Parking Lot	119.00	Space	0.00	47,600.00	0
Apartments Mid Rise	333.00	Dwelling Unit	8.28	428,763.00	1019
Strip Mall	5.30	1000sqft	0.00	5,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2026
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 - 8.28 ac lot. 333-unit apt: 428,763 gross sf res. 5.3k commercial. 462 space garage 195,874 sf. 119 space parking lot.

Construction Phase - Contractor info. 20 demo, no prep, 65 grad, 665 bldg, pav 20, 145 coat. overlap pav and coat with bldg.

Off-road Equipment -

Off-road Equipment - 2 crane, 4 forklift, 2 generator, 2 welders

Off-road Equipment - 1 concrete saw, 1 excavator, 1 dozer, 1 skid steer

Off-road Equipment - 1 excavator, 1 dozer, 1 loader, 1 backhoe

Off-road Equipment -

Off-road Equipment - No site prep phase

Latigo Hillcrest Mixed Use Project - Ventura County, Annual

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

Trips and VMT - 18 cy belly dump trucks = 1,869 trips for demo debris (8,140 tons = 33,636cy), 2,672 trips for export (48,100cy)

Demolition - 8,140 tons building and pavement debris

Grading - 35ac grading, combo of default 20 grading and 15 site prep. 48,100cy export

Architectural Coating - 50 g/L VOC VCAPCD rule 74.2

Vehicle Trips - Traffic study ADT- Housing 1,473 ADT (/333 = 4.42), Comm 315 ADT (/5.3 = 59.43)

Area Coating - rule 74.2

Water And Wastewater - Hill Canyon treatment plant

Construction Off-road Equipment Mitigation - Tier 4 Final

Area Mitigation - Rule 74.2

Woodstoves - no hearths

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	75.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Residential_Exterior	100	50
tblAreaCoating	Area_EF_Residential_Interior	75	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	20.00	65.00
tblConstructionPhase	NumDays	230.00	665.00
tblConstructionPhase	NumDays	20.00	145.00
tblConstructionPhase	PhaseEndDate	1/5/2024	12/22/2023
tblConstructionPhase	PhaseEndDate	2/2/2024	3/29/2024
tblConstructionPhase	PhaseEndDate	12/20/2024	10/16/2026
tblConstructionPhase	PhaseEndDate	2/14/2025	12/18/2026
tblConstructionPhase	PhaseEndDate	1/17/2025	10/16/2026
tblConstructionPhase	PhaseStartDate	1/6/2024	1/1/2024
tblConstructionPhase	PhaseStartDate	2/3/2024	4/1/2024
tblConstructionPhase	PhaseStartDate	1/18/2025	6/1/2026

Latigo Hillcrest Mixed Use Project - Ventura County, Annual

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

tblConstructionPhase	PhaseStartDate	12/21/2024	9/21/2026
tblGrading	AcresOfGrading	32.50	35.00
tblGrading	MaterialExported	0.00	48,100.00
tblLandUse	LandUseSquareFeet	184,800.00	195,874.00
tblLandUse	LandUseSquareFeet	333,000.00	428,763.00
tblLandUse	LotAcreage	4.16	0.00
tblLandUse	LotAcreage	1.07	0.00
tblLandUse	LotAcreage	8.76	8.28
tblLandUse	LotAcreage	0.12	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblTripsAndVMT	HaulingTripNumber	805.00	1,869.00
tblTripsAndVMT	HaulingTripNumber	6,013.00	2,672.00
tblVehicleTrips	ST_TR	4.91	4.42
tblVehicleTrips	ST_TR	42.04	59.43
tblVehicleTrips	SU_TR	4.09	4.42

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

tblVehicleTrips	SU_TR	20.43	59.43
tblVehicleTrips	WD_TR	5.44	4.42
tblVehicleTrips	WD_TR	44.32	59.43
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

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	0.0148	0.2383	0.1486	7.5000e-004	0.1050	6.3700e-003	0.1114	0.0180	6.0000e-003	0.0240	0.0000	72.9280	72.9280	8.3700e-003	8.4700e-003	75.6625
2024	0.3357	2.6172	3.0976	8.3900e-003	0.5663	0.0977	0.6641	0.2041	0.0925	0.2966	0.0000	760.1339	760.1339	0.0894	0.0379	773.6633
2025	0.3651	2.5832	3.4784	9.1100e-003	0.4281	0.0933	0.5213	0.1152	0.0887	0.2039	0.0000	817.6896	817.6896	0.0855	0.0334	829.7777
2026	1.7052	2.2161	3.0938	7.8800e-003	0.3811	0.0820	0.4631	0.1024	0.0781	0.1805	0.0000	706.8861	706.8861	0.0758	0.0265	716.6901
Maximum	**1.7052**	**2.6172**	**3.4784**	**9.1100e-003**	**0.5663**	**0.0977**	**0.6641**	**0.2041**	**0.0925**	**0.2966**	**0.0000**	**817.6896**	**817.6896**	**0.0894**	**0.0379**	**829.7777**

Latigo Hillcrest Mixed Use Project - Ventura County, Annual

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

2.1 Overall Construction

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	4.9400e-003	0.1386	0.1663	7.5000e-004	0.0565	1.1700e-003	0.0577	0.0106	1.1400e-003	0.0118	0.0000	72.9280	72.9280	8.3700e-003	8.4700e-003	75.6625
2024	0.1502	0.8938	3.3440	8.3900e-003	0.4466	0.0103	0.4569	0.1435	0.0101	0.1536	0.0000	760.1335	760.1335	0.0894	0.0379	773.6629
2025	0.1760	0.9061	3.7531	9.1100e-003	0.4281	0.0106	0.4387	0.1152	0.0103	0.1256	0.0000	817.6891	817.6891	0.0855	0.0334	829.7773
2026	1.5387	0.7387	3.3406	7.8800e-003	0.3811	9.1700e-003	0.3902	0.1024	8.9700e-003	0.1114	0.0000	706.8857	706.8857	0.0758	0.0265	716.6897
Maximum	**1.5387**	**0.9061**	**3.7531**	**9.1100e-003**	**0.4466**	**0.0106**	**0.4569**	**0.1435**	**0.0103**	**0.1536**	**0.0000**	**817.6891**	**817.6891**	**0.0894**	**0.0379**	**829.7773**

	ROG	NOx	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	**22.76**	**65.02**	**-8.00**	**0.00**	**11.36**	**88.82**	**23.66**	**15.44**	**88.50**	**42.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**11-27-2023**	**2-26-2024**	0.5976	0.2661
2	**2-27-2024**	**5-26-2024**	0.6821	0.2400
3	**5-27-2024**	**8-26-2024**	0.7862	0.2718
4	**8-27-2024**	**11-26-2024**	0.7922	0.2778
5	**11-27-2024**	**2-26-2025**	0.7650	0.2782
6	**2-27-2025**	**5-26-2025**	0.7161	0.2616
7	**5-27-2025**	**8-26-2025**	0.7368	0.2670
8	**8-27-2025**	**11-26-2025**	0.7425	0.2727

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

9	**11-27-2025**	**2-26-2026**	0.7430	0.2732
10	**2-27-2026**	**5-26-2026**	0.7117	0.2572
11	**5-27-2026**	**8-26-2026**	1.3759	0.8700
12	**8-27-2026**	**9-30-2026**	0.5716	0.3498
		Highest	1.3759	0.8700

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9244	0.0285	2.4756	1.3000e-004		0.0137	0.0137		0.0137	0.0137	0.0000	4.0494	4.0494	3.8900e-003	0.0000	4.1467
Energy	0.0201	0.1716	0.0732	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	627.4915	627.4915	0.0400	8.0300e-003	630.8844
Mobile	0.8066	0.9002	7.2756	0.0148	1.7141	0.0117	1.7258	0.4576	0.0109	0.4685	0.0000	1,365.0802	1,365.0802	0.0963	0.0664	1,387.2760
Waste						0.0000	0.0000		0.0000	0.0000	32.2248	0.0000	32.2248	1.9044	0.0000	79.8356
Water						0.0000	0.0000		0.0000	0.0000	7.8151	78.4322	86.2472	0.0335	0.0178	92.3889
Total	**2.7511**	**1.1003**	**9.8244**	**0.0160**	**1.7141**	**0.0393**	**1.7534**	**0.4576**	**0.0385**	**0.4961**	**40.0399**	**2,075.0532**	**2,115.0931**	**2.0782**	**0.0922**	**2,194.5317**

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9244	0.0285	2.4756	1.3000e-004		0.0137	0.0137		0.0137	0.0137	0.0000	4.0494	4.0494	3.8900e-003	0.0000	4.1467
Energy	0.0201	0.1716	0.0732	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	627.4915	627.4915	0.0400	8.0300e-003	630.8844
Mobile	0.8066	0.9002	7.2756	0.0148	1.7141	0.0117	1.7258	0.4576	0.0109	0.4685	0.0000	1,365.0802	1,365.0802	0.0963	0.0664	1,387.2760
Waste						0.0000	0.0000		0.0000	0.0000	32.2248	0.0000	32.2248	1.9044	0.0000	79.8356
Water						0.0000	0.0000		0.0000	0.0000	7.8151	78.4322	86.2472	0.0335	0.0178	92.3889
Total	**2.7511**	**1.1003**	**9.8244**	**0.0160**	**1.7141**	**0.0393**	**1.7534**	**0.4576**	**0.0385**	**0.4961**	**40.0399**	**2,075.0532**	**2,115.0931**	**2.0782**	**0.0922**	**2,194.5317**

	ROG	NOx	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	11/27/2023	12/22/2023	5	20	
2	Site Preparation	Site Preparation	12/23/2023	12/22/2023	5	0	
3	Grading	Grading	1/1/2024	3/29/2024	5	65	

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

4	Building Construction	Building Construction	4/1/2024	10/16/2026	5	665	
5	Architectural Coating	Architectural Coating	6/1/2026	12/18/2026	5	145	
6	Paving	Paving	9/21/2026	10/16/2026	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 35

Acres of Paving: 0

Residential Indoor: 868,245; Residential Outdoor: 289,415; Non-Residential Indoor: 7,950; Non-Residential Outdoor: 2,650; Striped Parking Area: 14,608 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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

Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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	4	10.00	0.00	1,869.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,672.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	344.00	76.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	69.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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					0.0882	0.0000	0.0882	0.0134	0.0000	0.0134	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1212	0.1140	2.2000e-004		5.5400e-003	5.5400e-003		5.2000e-003	5.2000e-003	0.0000	19.2273	19.2273	4.7400e-003	0.0000	19.3459
Total	**0.0127**	**0.1212**	**0.1140**	**2.2000e-004**	**0.0882**	**5.5400e-003**	**0.0937**	**0.0134**	**5.2000e-003**	**0.0186**	**0.0000**	**19.2273**	**19.2273**	**4.7400e-003**	**0.0000**	**19.3459**

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	1.8400e-003	0.1169	0.0321	5.3000e-004	0.0161	8.3000e-004	0.0169	4.4000e-003	7.9000e-004	5.2000e-003	0.0000	53.0815	53.0815	3.6100e-003	8.4600e-003	55.6914
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.0000e-004	2.4800e-003	1.0000e-005	8.1000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6193	0.6193	2.0000e-005	2.0000e-005	0.6253
Total	**2.1300e-003**	**0.1171**	**0.0346**	**5.4000e-004**	**0.0169**	**8.3000e-004**	**0.0177**	**4.6100e-003**	**7.9000e-004**	**5.4200e-003**	**0.0000**	**53.7008**	**53.7008**	**3.6300e-003**	**8.4800e-003**	**56.3166**

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

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0397	0.0000	0.0397	6.0100e-003	0.0000	6.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8100e-003	0.0216	0.1317	2.2000e-004		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	19.2273	19.2273	4.7400e-003	0.0000	19.3459
Total	**2.8100e-003**	**0.0216**	**0.1317**	**2.2000e-004**	**0.0397**	**3.4000e-004**	**0.0400**	**6.0100e-003**	**3.4000e-004**	**6.3500e-003**	**0.0000**	**19.2273**	**19.2273**	**4.7400e-003**	**0.0000**	**19.3459**

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	1.8400e-003	0.1169	0.0321	5.3000e-004	0.0161	8.3000e-004	0.0169	4.4000e-003	7.9000e-004	5.2000e-003	0.0000	53.0815	53.0815	3.6100e-003	8.4600e-003	55.6914
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.0000e-004	2.4800e-003	1.0000e-005	8.1000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6193	0.6193	2.0000e-005	2.0000e-005	0.6253
Total	**2.1300e-003**	**0.1171**	**0.0346**	**5.4000e-004**	**0.0169**	**8.3000e-004**	**0.0177**	**4.6100e-003**	**7.9000e-004**	**5.4200e-003**	**0.0000**	**53.7008**	**53.7008**	**3.6300e-003**	**8.4800e-003**	**56.3166**

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

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2177	0.0000	0.2177	0.1101	0.0000	0.1101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0378	0.3714	0.3532	6.5000e-004		0.0170	0.0170		0.0156	0.0156	0.0000	56.9262	56.9262	0.0184	0.0000	57.3864
Total	**0.0378**	**0.3714**	**0.3532**	**6.5000e-004**	**0.2177**	**0.0170**	**0.2347**	**0.1101**	**0.0156**	**0.1257**	**0.0000**	**56.9262**	**56.9262**	**0.0184**	**0.0000**	**57.3864**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6100e-003	0.1656	0.0472	7.4000e-004	0.0230	1.1800e-003	0.0241	6.3000e-003	1.1300e-003	7.4300e-003	0.0000	74.6387	74.6387	5.3100e-003	0.0119	78.3170
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	8.7000e-004	5.8000e-004	7.5200e-003	2.0000e-005	2.6200e-003	1.0000e-005	2.6300e-003	7.0000e-004	1.0000e-005	7.1000e-004	0.0000	1.9510	1.9510	6.0000e-005	6.0000e-005	1.9691
Total	**3.4800e-003**	**0.1662**	**0.0548**	**7.6000e-004**	**0.0256**	**1.1900e-003**	**0.0268**	**7.0000e-003**	**1.1400e-003**	**8.1400e-003**	**0.0000**	**76.5897**	**76.5897**	**5.3700e-003**	**0.0120**	**80.2861**

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

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0980	0.0000	0.0980	0.0495	0.0000	0.0495	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e-003	0.0344	0.4042	6.5000e-004		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003	0.0000	56.9261	56.9261	0.0184	0.0000	57.3864
Total	**7.9300e-003**	**0.0344**	**0.4042**	**6.5000e-004**	**0.0980**	**1.0600e-003**	**0.0990**	**0.0495**	**1.0600e-003**	**0.0506**	**0.0000**	**56.9261**	**56.9261**	**0.0184**	**0.0000**	**57.3864**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6100e-003	0.1656	0.0472	7.4000e-004	0.0230	1.1800e-003	0.0241	6.3000e-003	1.1300e-003	7.4300e-003	0.0000	74.6387	74.6387	5.3100e-003	0.0119	78.3170
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	8.7000e-004	5.8000e-004	7.5200e-003	2.0000e-005	2.6200e-003	1.0000e-005	2.6300e-003	7.0000e-004	1.0000e-005	7.1000e-004	0.0000	1.9510	1.9510	6.0000e-005	6.0000e-005	1.9691
Total	**3.4800e-003**	**0.1662**	**0.0548**	**7.6000e-004**	**0.0256**	**1.1900e-003**	**0.0268**	**7.0000e-003**	**1.1400e-003**	**8.1400e-003**	**0.0000**	**76.5897**	**76.5897**	**5.3700e-003**	**0.0120**	**80.2861**

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

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1969	1.7254	1.8043	3.4000e-003		0.0764	0.0764		0.0728	0.0728	0.0000	288.7202	288.7202	0.0537	0.0000	290.0618
Total	**0.1969**	**1.7254**	**1.8043**	**3.4000e-003**		**0.0764**	**0.0764**		**0.0728**	**0.0728**	**0.0000**	**288.7202**	**288.7202**	**0.0537**	**0.0000**	**290.0618**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.1000e-003	0.2933	0.1017	1.3600e-003	0.0499	1.6900e-003	0.0516	0.0144	1.6200e-003	0.0160	0.0000	134.4948	134.4948	5.7500e-003	0.0201	140.6374
Worker	0.0904	0.0609	0.7837	2.2200e-003	0.2732	1.4400e-003	0.2747	0.0726	1.3200e-003	0.0739	0.0000	203.4031	203.4031	6.2000e-003	5.8200e-003	205.2917
Total	**0.0975**	**0.3542**	**0.8854**	**3.5800e-003**	**0.3231**	**3.1300e-003**	**0.3262**	**0.0870**	**2.9400e-003**	**0.0899**	**0.0000**	**337.8979**	**337.8979**	**0.0120**	**0.0260**	**345.9290**

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

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0412	0.3391	1.9997	3.4000e-003		4.9200e-003	4.9200e-003		4.9200e-003	4.9200e-003	0.0000	288.7198	288.7198	0.0537	0.0000	290.0614
Total	**0.0412**	**0.3391**	**1.9997**	**3.4000e-003**		**4.9200e-003**	**4.9200e-003**		**4.9200e-003**	**4.9200e-003**	**0.0000**	**288.7198**	**288.7198**	**0.0537**	**0.0000**	**290.0614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.1000e-003	0.2933	0.1017	1.3600e-003	0.0499	1.6900e-003	0.0516	0.0144	1.6200e-003	0.0160	0.0000	134.4948	134.4948	5.7500e-003	0.0201	140.6374
Worker	0.0904	0.0609	0.7837	2.2200e-003	0.2732	1.4400e-003	0.2747	0.0726	1.3200e-003	0.0739	0.0000	203.4031	203.4031	6.2000e-003	5.8200e-003	205.2917
Total	**0.0975**	**0.3542**	**0.8854**	**3.5800e-003**	**0.3231**	**3.1300e-003**	**0.3262**	**0.0870**	**2.9400e-003**	**0.0899**	**0.0000**	**337.8979**	**337.8979**	**0.0120**	**0.0260**	**345.9290**

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

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2437	2.1262	2.3746	4.5000e-003		0.0892	0.0892		0.0849	0.0849	0.0000	382.5215	382.5215	0.0702	0.0000	384.2774
Total	**0.2437**	**2.1262**	**2.3746**	**4.5000e-003**		**0.0892**	**0.0892**		**0.0849**	**0.0849**	**0.0000**	**382.5215**	**382.5215**	**0.0702**	**0.0000**	**384.2774**

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	9.1900e-003	0.3842	0.1342	1.7700e-003	0.0661	2.2500e-003	0.0684	0.0191	2.1500e-003	0.0212	0.0000	174.9365	174.9365	7.8300e-003	0.0262	182.9317
Worker	0.1122	0.0727	0.9696	2.8400e-003	0.3620	1.8100e-003	0.3638	0.0962	1.6700e-003	0.0978	0.0000	260.2316	260.2316	7.4700e-003	7.2200e-003	262.5686
Total	**0.1214**	**0.4570**	**1.1038**	**4.6100e-003**	**0.4281**	**4.0600e-003**	**0.4321**	**0.1152**	**3.8200e-003**	**0.1190**	**0.0000**	**435.1681**	**435.1681**	**0.0153**	**0.0334**	**445.5004**

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

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0546	0.4492	2.6493	4.5000e-003		6.5200e-003	6.5200e-003		6.5200e-003	6.5200e-003	0.0000	382.5210	382.5210	0.0702	0.0000	384.2769
Total	**0.0546**	**0.4492**	**2.6493**	**4.5000e-003**		**6.5200e-003**	**6.5200e-003**		**6.5200e-003**	**6.5200e-003**	**0.0000**	**382.5210**	**382.5210**	**0.0702**	**0.0000**	**384.2769**

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	9.1900e-003	0.3842	0.1342	1.7700e-003	0.0661	2.2500e-003	0.0684	0.0191	2.1500e-003	0.0212	0.0000	174.9365	174.9365	7.8300e-003	0.0262	182.9317
Worker	0.1122	0.0727	0.9696	2.8400e-003	0.3620	1.8100e-003	0.3638	0.0962	1.6700e-003	0.0978	0.0000	260.2316	260.2316	7.4700e-003	7.2200e-003	262.5686
Total	**0.1214**	**0.4570**	**1.1038**	**4.6100e-003**	**0.4281**	**4.0600e-003**	**0.4321**	**0.1152**	**3.8200e-003**	**0.1190**	**0.0000**	**435.1681**	**435.1681**	**0.0153**	**0.0334**	**445.5004**

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

3.5 Building Construction - 2026

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	0.1933	1.6863	1.8833	3.5700e-003		0.0707	0.0707		0.0673	0.0673	0.0000	303.3791	303.3791	0.0557	0.0000	304.7717
Total	**0.1933**	**1.6863**	**1.8833**	**3.5700e-003**		**0.0707**	**0.0707**		**0.0673**	**0.0673**	**0.0000**	**303.3791**	**303.3791**	**0.0557**	**0.0000**	**304.7717**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.1300e-003	0.3009	0.1063	1.3800e-003	0.0524	1.7700e-003	0.0542	0.0151	1.7000e-003	0.0168	0.0000	136.1713	136.1713	6.3800e-003	0.0204	142.3994
Worker	0.0836	0.0525	0.7227	2.1800e-003	0.2871	1.3600e-003	0.2884	0.0763	1.2500e-003	0.0775	0.0000	199.8794	199.8794	5.4100e-003	5.4000e-003	201.6233
Total	**0.0907**	**0.3534**	**0.8290**	**3.5600e-003**	**0.3395**	**3.1300e-003**	**0.3426**	**0.0914**	**2.9500e-003**	**0.0943**	**0.0000**	**336.0507**	**336.0507**	**0.0118**	**0.0258**	**344.0226**

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

3.5 Building Construction - 2026

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	0.0433	0.3563	2.1012	3.5700e-003		5.1700e-003	5.1700e-003		5.1700e-003	5.1700e-003	0.0000	303.3787	303.3787	0.0557	0.0000	304.7713
Total	**0.0433**	**0.3563**	**2.1012**	**3.5700e-003**		**5.1700e-003**	**5.1700e-003**		**5.1700e-003**	**5.1700e-003**	**0.0000**	**303.3787**	**303.3787**	**0.0557**	**0.0000**	**304.7713**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.1300e-003	0.3009	0.1063	1.3800e-003	0.0524	1.7700e-003	0.0542	0.0151	1.7000e-003	0.0168	0.0000	136.1713	136.1713	6.3800e-003	0.0204	142.3994
Worker	0.0836	0.0525	0.7227	2.1800e-003	0.2871	1.3600e-003	0.2884	0.0763	1.2500e-003	0.0775	0.0000	199.8794	199.8794	5.4100e-003	5.4000e-003	201.6233
Total	**0.0907**	**0.3534**	**0.8290**	**3.5600e-003**	**0.3395**	**3.1300e-003**	**0.3426**	**0.0914**	**2.9500e-003**	**0.0943**	**0.0000**	**336.0507**	**336.0507**	**0.0118**	**0.0258**	**344.0226**

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

3.6 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3876					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.0831	0.1312	2.2000e-004		3.7300e-003	3.7300e-003		3.7300e-003	3.7300e-003	0.0000	18.5111	18.5111	1.0100e-003	0.0000	18.5363
Total	**1.4000**	**0.0831**	**0.1312**	**2.2000e-004**		**3.7300e-003**	**3.7300e-003**		**3.7300e-003**	**3.7300e-003**	**0.0000**	**18.5111**	**18.5111**	**1.0100e-003**	**0.0000**	**18.5363**

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	0.0118	7.3700e-003	0.1015	3.1000e-004	0.0403	1.9000e-004	0.0405	0.0107	1.8000e-004	0.0109	0.0000	28.0838	28.0838	7.6000e-004	7.6000e-004	28.3289
Total	**0.0118**	**7.3700e-003**	**0.1015**	**3.1000e-004**	**0.0403**	**1.9000e-004**	**0.0405**	**0.0107**	**1.8000e-004**	**0.0109**	**0.0000**	**28.0838**	**28.0838**	**7.6000e-004**	**7.6000e-004**	**28.3289**

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

3.6 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3876					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1500e-003	9.3400e-003	0.1329	2.2000e-004		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	18.5111	18.5111	1.0100e-003	0.0000	18.5363
Total	**1.3897**	**9.3400e-003**	**0.1329**	**2.2000e-004**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**18.5111**	**18.5111**	**1.0100e-003**	**0.0000**	**18.5363**

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	0.0118	7.3700e-003	0.1015	3.1000e-004	0.0403	1.9000e-004	0.0405	0.0107	1.8000e-004	0.0109	0.0000	28.0838	28.0838	7.6000e-004	7.6000e-004	28.3289
Total	**0.0118**	**7.3700e-003**	**0.1015**	**3.1000e-004**	**0.0403**	**1.9000e-004**	**0.0405**	**0.0107**	**1.8000e-004**	**0.0109**	**0.0000**	**28.0838**	**28.0838**	**7.6000e-004**	**7.6000e-004**	**28.3289**

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

3.7 Paving - 2026

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	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0193	20.0193	6.4700e-003	0.0000	20.1811
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.1500e-003**	**0.0858**	**0.1458**	**2.3000e-004**		**4.1900e-003**	**4.1900e-003**		**3.8500e-003**	**3.8500e-003**	**0.0000**	**20.0193**	**20.0193**	**6.4700e-003**	**0.0000**	**20.1811**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.2000e-004	3.0400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8421	0.8421	2.0000e-005	2.0000e-005	0.8494
Total	**3.5000e-004**	**2.2000e-004**	**3.0400e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.8421**	**0.8421**	**2.0000e-005**	**2.0000e-005**	**0.8494**

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

3.7 Paving - 2026

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	2.8000e-003	0.0122	0.1730	2.3000e-004		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	20.0192	20.0192	6.4700e-003	0.0000	20.1811
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8000e-003**	**0.0122**	**0.1730**	**2.3000e-004**		**3.7000e-004**	**3.7000e-004**		**3.7000e-004**	**3.7000e-004**	**0.0000**	**20.0192**	**20.0192**	**6.4700e-003**	**0.0000**	**20.1811**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.2000e-004	3.0400e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8421	0.8421	2.0000e-005	2.0000e-005	0.8494
Total	**3.5000e-004**	**2.2000e-004**	**3.0400e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.8421**	**0.8421**	**2.0000e-005**	**2.0000e-005**	**0.8494**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8066	0.9002	7.2756	0.0148	1.7141	0.0117	1.7258	0.4576	0.0109	0.4685	0.0000	1,365.0802	1,365.0802	0.0963	0.0664	1,387.2760
Unmitigated	0.8066	0.9002	7.2756	0.0148	1.7141	0.0117	1.7258	0.4576	0.0109	0.4685	0.0000	1,365.0802	1,365.0802	0.0963	0.0664	1,387.2760

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,471.86	1,471.86	1471.86	4,066,856	4,066,856
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	314.98	314.98	314.98	485,078	485,078
Total	1,786.84	1,786.84	1,786.84	4,551,934	4,551,934

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
Apartments Mid Rise	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

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

	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
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303
Enclosed Parking with Elevator	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303
Parking Lot	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303
Strip Mall	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Latigo Hillcrest Mixed Use Project - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	428.7983	428.7983	0.0362	4.3900e-003	431.0104
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	428.7983	428.7983	0.0362	4.3900e-003	431.0104
NaturalGas Mitigated	0.0201	0.1716	0.0732	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.6932	198.6932	3.8100e-003	3.6400e-003	199.8740
NaturalGas Unmitigated	0.0201	0.1716	0.0732	1.1000e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.6932	198.6932	3.8100e-003	3.6400e-003	199.8740

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.71282e+006	0.0200	0.1711	0.0728	1.0900e-003		0.0138	0.0138		0.0138	0.0138	0.0000	198.1304	198.1304	3.8000e-003	3.6300e-003	199.3078
Enclosed Parking with Elevator	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
Strip Mall	10547	6.0000e-005	5.2000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5628	0.5628	1.0000e-005	1.0000e-005	0.5662
Total		**0.0201**	**0.1716**	**0.0732**	**1.0900e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**	**0.0000**	**198.6932**	**198.6932**	**3.8100e-003**	**3.6400e-003**	**199.8740**

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.71282e+006	0.0200	0.1711	0.0728	1.0900e-003		0.0138	0.0138		0.0138	0.0138	0.0000	198.1304	198.1304	3.8000e-003	3.6300e-003	199.3078
Enclosed Parking with Elevator	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
Strip Mall	10547	6.0000e-005	5.2000e-004	4.3000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5628	0.5628	1.0000e-005	1.0000e-005	0.5662
Total		**0.0201**	**0.1716**	**0.0732**	**1.0900e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**	**0.0000**	**198.6932**	**198.6932**	**3.8100e-003**	**3.6400e-003**	**199.8740**

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.27667e+006	226.4109	0.0191	2.3200e-003	227.5789
Enclosed Parking with Elevator	1.06555e+006	188.9714	0.0160	1.9300e-003	189.9462
Parking Lot	16660	2.9546	2.5000e-004	3.0000e-005	2.9698
Strip Mall	58989	10.4614	8.8000e-004	1.1000e-004	10.5154
Total		**428.7983**	**0.0362**	**4.3900e-003**	**431.0104**

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

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.27667e+006	226.4109	0.0191	2.3200e-003	227.5789
Enclosed Parking with Elevator	1.06555e+006	188.9714	0.0160	1.9300e-003	189.9462
Parking Lot	16660	2.9546	2.5000e-004	3.0000e-005	2.9698
Strip Mall	58989	10.4614	8.8000e-004	1.1000e-004	10.5154
Total		**428.7983**	**0.0362**	**4.3900e-003**	**431.0104**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9244	0.0285	2.4756	1.3000e-004		0.0137	0.0137		0.0137	0.0137	0.0000	4.0494	4.0494	3.8900e-003	0.0000	4.1467
Unmitigated	1.9244	0.0285	2.4756	1.3000e-004		0.0137	0.0137		0.0137	0.0137	0.0000	4.0494	4.0494	3.8900e-003	0.0000	4.1467

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	0.1388					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7110					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0747	0.0285	2.4756	1.3000e-004		0.0137	0.0137		0.0137	0.0137	0.0000	4.0494	4.0494	3.8900e-003	0.0000	4.1467
Total	**1.9244**	**0.0285**	**2.4756**	**1.3000e-004**		**0.0137**	**0.0137**		**0.0137**	**0.0137**	**0.0000**	**4.0494**	**4.0494**	**3.8900e-003**	**0.0000**	**4.1467**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1388					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7110					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0747	0.0285	2.4756	1.3000e-004		0.0137	0.0137		0.0137	0.0137	0.0000	4.0494	4.0494	3.8900e-003	0.0000	4.1467
Total	**1.9244**	**0.0285**	**2.4756**	**1.3000e-004**		**0.0137**	**0.0137**		**0.0137**	**0.0137**	**0.0000**	**4.0494**	**4.0494**	**3.8900e-003**	**0.0000**	**4.1467**

7.0 Water Detail

7.1 Mitigation Measures Water

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	86.2472	0.0335	0.0178	92.3889
Unmitigated	86.2472	0.0335	0.0178	92.3889

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	21.6963 / 13.6781	84.7277	0.0329	0.0175	90.7603
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.392584 / 0.240616	1.5196	5.9000e-004	3.2000e-004	1.6286
Total		**86.2472**	**0.0335**	**0.0178**	**92.3889**

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

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	21.6963 / 13.6781	84.7277	0.0329	0.0175	90.7603
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.392584 / 0.240616	1.5196	5.9000e-004	3.2000e-004	1.6286
Total		**86.2472**	**0.0335**	**0.0178**	**92.3889**

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	32.2248	1.9044	0.0000	79.8356
Unmitigated	32.2248	1.9044	0.0000	79.8356

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	153.18	31.0942	1.8376	0.0000	77.0345
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	5.57	1.1307	0.0668	0.0000	2.8012
Total		**32.2248**	**1.9044**	**0.0000**	**79.8356**

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

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	153.18	31.0942	1.8376	0.0000	77.0345
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	5.57	1.1307	0.0668	0.0000	2.8012
Total		**32.2248**	**1.9044**	**0.0000**	**79.8356**

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

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

Equipment Type	Number

11.0 Vegetation

Latigo Hillcrest Mixed Use Project - Ventura County, Summer

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

Latigo Hillcrest Mixed Use Project

Ventura County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	462.00	Space	0.00	195,874.00	0
Parking Lot	119.00	Space	0.00	47,600.00	0
Apartments Mid Rise	333.00	Dwelling Unit	8.28	428,763.00	1019
Strip Mall	5.30	1000sqft	0.00	5,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2026
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 - 8.28 ac lot. 333-unit apt: 428,763 gross sf res. 5.3k commercial. 462 space garage 195,874 sf. 119 space parking lot.

Construction Phase - Contractor info. 20 demo, no prep, 65 grad, 665 bldg, pav 20, 145 coat. overlap pav and coat with bldg.

Off-road Equipment -

Off-road Equipment - 2 crane, 4 forklift, 2 generator, 2 welders

Off-road Equipment - 1 concrete saw, 1 excavator, 1 dozer, 1 skid steer

Off-road Equipment - 1 excavator, 1 dozer, 1 loader, 1 backhoe

Off-road Equipment -

Off-road Equipment - No site prep phase

Latigo Hillcrest Mixed Use Project - Ventura County, Summer

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

Trips and VMT - 18 cy belly dump trucks = 1,869 trips for demo debris (8,140 tons = 33,636cy), 2,672 trips for export (48,100cy)

Demolition - 8,140 tons building and pavement debris

Grading - 35ac grading, combo of default 20 grading and 15 site prep. 48,100cy export

Architectural Coating - 50 g/L VOC VCAPCD rule 74.2

Vehicle Trips - Traffic study ADT- Housing 1,473 ADT (/333 = 4.42), Comm 315 ADT (/5.3 = 59.43)

Area Coating - rule 74.2

Water And Wastewater - Hill Canyon treatment plant

Construction Off-road Equipment Mitigation - Tier 4 Final

Area Mitigation - Rule 74.2

Woodstoves - no hearths

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	75.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Residential_Exterior	100	50
tblAreaCoating	Area_EF_Residential_Interior	75	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	20.00	65.00
tblConstructionPhase	NumDays	230.00	665.00
tblConstructionPhase	NumDays	20.00	145.00
tblConstructionPhase	PhaseEndDate	1/5/2024	12/22/2023
tblConstructionPhase	PhaseEndDate	2/2/2024	3/29/2024
tblConstructionPhase	PhaseEndDate	12/20/2024	10/16/2026
tblConstructionPhase	PhaseEndDate	2/14/2025	12/18/2026
tblConstructionPhase	PhaseEndDate	1/17/2025	10/16/2026
tblConstructionPhase	PhaseStartDate	1/6/2024	1/1/2024
tblConstructionPhase	PhaseStartDate	2/3/2024	4/1/2024
tblConstructionPhase	PhaseStartDate	1/18/2025	6/1/2026

Latigo Hillcrest Mixed Use Project - Ventura County, Summer

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

tblConstructionPhase	PhaseStartDate	12/21/2024	9/21/2026
tblGrading	AcresOfGrading	32.50	35.00
tblGrading	MaterialExported	0.00	48,100.00
tblLandUse	LandUseSquareFeet	184,800.00	195,874.00
tblLandUse	LandUseSquareFeet	333,000.00	428,763.00
tblLandUse	LotAcreage	4.16	0.00
tblLandUse	LotAcreage	1.07	0.00
tblLandUse	LotAcreage	8.76	8.28
tblLandUse	LotAcreage	0.12	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblTripsAndVMT	HaulingTripNumber	805.00	1,869.00
tblTripsAndVMT	HaulingTripNumber	6,013.00	2,672.00
tblVehicleTrips	ST_TR	4.91	4.42
tblVehicleTrips	ST_TR	42.04	59.43
tblVehicleTrips	SU_TR	4.09	4.42

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

tblVehicleTrips	SU_TR	20.43	59.43
tblVehicleTrips	WD_TR	5.44	4.42
tblVehicleTrips	WD_TR	44.32	59.43
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

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	1.4892	23.3516	14.8493	0.0754	10.5317	0.6371	11.1687	1.8041	0.5994	2.4035	0.0000	8,039.2822	8,039.2822	0.9233	0.9335	8,340.5519
2024	2.9966	20.9315	27.5338	0.0717	7.4970	0.8074	8.0570	3.6060	0.7687	4.1226	0.0000	7,097.5186	7,097.5186	0.8066	0.4051	7,200.7662
2025	2.8043	19.6208	26.8567	0.0706	3.3402	0.7145	4.0547	0.8976	0.6798	1.5774	0.0000	6,988.8023	6,988.8023	0.7194	0.2771	7,089.3743
2026	23.1736	29.3776	44.5290	0.1007	4.0303	1.1870	5.2173	1.0806	1.1186	2.1992	0.0000	9,916.9120	9,916.9120	1.4584	0.2828	10,037.6298
Maximum	**23.1736**	**29.3776**	**44.5290**	**0.1007**	**10.5317**	**1.1870**	**11.1687**	**3.6060**	**1.1186**	**4.1226**	**0.0000**	**9,916.9120**	**9,916.9120**	**1.4584**	**0.9335**	**10,037.6298**

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

2.1 Overall Construction (Maximum Daily Emission)

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	0.4987	13.3875	16.6213	0.0754	5.6817	0.1171	5.7988	1.0696	0.1135	1.1831	0.0000	8,039.2822	8,039.2822	0.9233	0.9335	8,340.5519
2024	1.4160	6.8564	29.5172	0.0717	3.8136	0.0817	3.8829	1.7428	0.0798	1.8106	0.0000	7,097.5186	7,097.5186	0.8066	0.4051	7,200.7662
2025	1.3555	6.7699	28.9621	0.0706	3.3402	0.0810	3.4212	0.8976	0.0792	0.9768	0.0000	6,988.8023	6,988.8023	0.7194	0.2771	7,089.3743
2026	20.9490	8.1436	49.3754	0.1007	4.0303	0.1248	4.1551	1.0806	0.1228	1.2034	0.0000	9,916.9120	9,916.9120	1.4584	0.2828	10,037.6298
Maximum	**20.9490**	**13.3875**	**49.3754**	**0.1007**	**5.6817**	**0.1248**	**5.7988**	**1.7428**	**0.1228**	**1.8106**	**0.0000**	**9,916.9120**	**9,916.9120**	**1.4584**	**0.9335**	**10,037.6298**

	ROG	NOx	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	**20.50**	**62.31**	**-9.41**	**0.00**	**33.60**	**87.91**	**39.44**	**35.16**	**87.52**	**49.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.9651	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525	0.0000	49.5962	49.5962	0.0477	0.0000	50.7889
Energy	0.1100	0.9403	0.4013	6.0000e-003		0.0760	0.0760		0.0760	0.0760		1,200.1194	1,200.1194	0.0230	0.0220	1,207.2511
Mobile	4.6231	4.5656	38.9606	0.0837	9.5936	0.0642	9.6577	2.5573	0.0599	2.6171		8,516.8975	8,516.8975	0.5565	0.3830	8,644.9415
Total	**15.6982**	**5.8225**	**66.8684**	**0.0911**	**9.5936**	**0.2927**	**9.8862**	**2.5573**	**0.2884**	**2.8456**	**0.0000**	**9,766.6131**	**9,766.6131**	**0.6272**	**0.4050**	**9,902.9815**

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	10.9651	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525	0.0000	49.5962	49.5962	0.0477	0.0000	50.7889
Energy	0.1100	0.9403	0.4013	6.0000e-003		0.0760	0.0760		0.0760	0.0760		1,200.1194	1,200.1194	0.0230	0.0220	1,207.2511
Mobile	4.6231	4.5656	38.9606	0.0837	9.5936	0.0642	9.6577	2.5573	0.0599	2.6171		8,516.8975	8,516.8975	0.5565	0.3830	8,644.9415
Total	**15.6982**	**5.8225**	**66.8684**	**0.0911**	**9.5936**	**0.2927**	**9.8862**	**2.5573**	**0.2884**	**2.8456**	**0.0000**	**9,766.6131**	**9,766.6131**	**0.6272**	**0.4050**	**9,902.9815**

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

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/27/2023	12/22/2023	5	20	
2	Site Preparation	Site Preparation	12/23/2023	12/22/2023	5	0	
3	Grading	Grading	1/1/2024	3/29/2024	5	65	
4	Building Construction	Building Construction	4/1/2024	10/16/2026	5	665	
5	Architectural Coating	Architectural Coating	6/1/2026	12/18/2026	5	145	
6	Paving	Paving	9/21/2026	10/16/2026	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 35

Acres of Paving: 0

Residential Indoor: 868,245; Residential Outdoor: 289,415; Non-Residential Indoor: 7,950; Non-Residential Outdoor: 2,650; Striped Parking Area: 14,608 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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

Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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	4	10.00	0.00	1,869.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,672.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	344.00	76.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	69.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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

Water Exposed Area

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					8.8181	0.0000	8.8181	1.3354	0.0000	1.3354			0.0000			0.0000
Off-Road	1.2719	12.1212	11.4013	0.0220		0.5541	0.5541		0.5201	0.5201		2,119.4455	2,119.4455	0.5230		2,132.5203
Total	**1.2719**	**12.1212**	**11.4013**	**0.0220**	**8.8181**	**0.5541**	**9.3722**	**1.3354**	**0.5201**	**1.8554**		**2,119.4455**	**2,119.4455**	**0.5230**		**2,132.5203**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	0.1886	11.2127	3.1919	0.0527	1.6314	0.0825	1.7140	0.4469	0.0790	0.5259		5,848.9892	5,848.9892	0.3982	0.9316	6,136.5732
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	0.0288	0.0178	0.2561	7.0000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		70.8475	70.8475	2.1000e-003	1.8700e-003	71.4584
Total	**0.2174**	**11.2304**	**3.4480**	**0.0534**	**1.7136**	**0.0830**	**1.7966**	**0.4687**	**0.0794**	**0.5481**		**5,919.8367**	**5,919.8367**	**0.4003**	**0.9335**	**6,208.0316**

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					3.9681	0.0000	3.9681	0.6009	0.0000	0.6009			0.0000			0.0000
Off-Road	0.2814	2.1570	13.1733	0.0220		0.0341	0.0341		0.0341	0.0341	0.0000	2,119.4455	2,119.4455	0.5230		2,132.5203
Total	**0.2814**	**2.1570**	**13.1733**	**0.0220**	**3.9681**	**0.0341**	**4.0023**	**0.6009**	**0.0341**	**0.6351**	**0.0000**	**2,119.4455**	**2,119.4455**	**0.5230**		**2,132.5203**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	0.1886	11.2127	3.1919	0.0527	1.6314	0.0825	1.7140	0.4469	0.0790	0.5259		5,848.9892	5,848.9892	0.3982	0.9316	6,136.5732
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	0.0288	0.0178	0.2561	7.0000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		70.8475	70.8475	2.1000e-003	1.8700e-003	71.4584
Total	**0.2174**	**11.2304**	**3.4480**	**0.0534**	**1.7136**	**0.0830**	**1.7966**	**0.4687**	**0.0794**	**0.5481**		**5,919.8367**	**5,919.8367**	**0.4003**	**0.9335**	**6,208.0316**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6971	0.0000	6.6971	3.3876	0.0000	3.3876			0.0000			0.0000
Off-Road	1.1632	11.4270	10.8673	0.0199		0.5232	0.5232		0.4813	0.4813		1,930.7799	1,930.7799	0.6245		1,946.3912
Total	**1.1632**	**11.4270**	**10.8673**	**0.0199**	**6.6971**	**0.5232**	**7.2203**	**3.3876**	**0.4813**	**3.8690**		**1,930.7799**	**1,930.7799**	**0.6245**		**1,946.3912**

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

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0825	4.8879	1.4462	0.0227	0.7177	0.0364	0.7541	0.1966	0.0348	0.2314		2,530.5461	2,530.5461	0.1803	0.4034	2,655.2555
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	0.0269	0.0159	0.2383	6.8000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.6705	68.6705	1.9200e-003	1.7500e-003	69.2393
Total	**0.1093**	**4.9038**	**1.6846**	**0.0234**	**0.7999**	**0.0368**	**0.8367**	**0.2184**	**0.0352**	**0.2536**		**2,599.2166**	**2,599.2166**	**0.1822**	**0.4051**	**2,724.4948**

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					3.0137	0.0000	3.0137	1.5244	0.0000	1.5244			0.0000			0.0000
Off-Road	0.2441	1.0575	12.4357	0.0199		0.0325	0.0325		0.0325	0.0325	0.0000	1,930.7799	1,930.7799	0.6245		1,946.3912
Total	**0.2441**	**1.0575**	**12.4357**	**0.0199**	**3.0137**	**0.0325**	**3.0462**	**1.5244**	**0.0325**	**1.5570**	**0.0000**	**1,930.7799**	**1,930.7799**	**0.6245**		**1,946.3912**

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

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0825	4.8879	1.4462	0.0227	0.7177	0.0364	0.7541	0.1966	0.0348	0.2314		2,530.5461	2,530.5461	0.1803	0.4034	2,655.2555
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	0.0269	0.0159	0.2383	6.8000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		68.6705	68.6705	1.9200e-003	1.7500e-003	69.2393
Total	**0.1093**	**4.9038**	**1.6846**	**0.0234**	**0.7999**	**0.0368**	**0.8367**	**0.2184**	**0.0352**	**0.2536**		**2,599.2166**	**2,599.2166**	**0.1822**	**0.4051**	**2,724.4948**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9991	17.5172	18.3181	0.0345		0.7756	0.7756		0.7389	0.7389		3,231.0608	3,231.0608	0.6006		3,246.0748
Total	**1.9991**	**17.5172**	**18.3181**	**0.0345**		**0.7756**	**0.7756**		**0.7389**	**0.7389**		**3,231.0608**	**3,231.0608**	**0.6006**		**3,246.0748**

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

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0736	2.8658	1.0180	0.0138	0.5143	0.0172	0.5315	0.1480	0.0164	0.1644		1,504.1929	1,504.1929	0.0644	0.2250	1,572.8585
Worker	0.9239	0.5485	8.1978	0.0234	2.8259	0.0146	2.8405	0.7496	0.0134	0.7630		2,362.2650	2,362.2650	0.0659	0.0601	2,381.8329
Total	**0.9975**	**3.4143**	**9.2157**	**0.0372**	**3.3402**	**0.0317**	**3.3719**	**0.8976**	**0.0299**	**0.9274**		**3,866.4578**	**3,866.4578**	**0.1304**	**0.2852**	**3,954.6914**

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	0.4186	3.4421	20.3015	0.0345		0.0500	0.0500		0.0500	0.0500	0.0000	3,231.0608	3,231.0608	0.6006		3,246.0748
Total	**0.4186**	**3.4421**	**20.3015**	**0.0345**		**0.0500**	**0.0500**		**0.0500**	**0.0500**	**0.0000**	**3,231.0608**	**3,231.0608**	**0.6006**		**3,246.0748**

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

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0736	2.8658	1.0180	0.0138	0.5143	0.0172	0.5315	0.1480	0.0164	0.1644		1,504.1929	1,504.1929	0.0644	0.2250	1,572.8585
Worker	0.9239	0.5485	8.1978	0.0234	2.8259	0.0146	2.8405	0.7496	0.0134	0.7630		2,362.2650	2,362.2650	0.0659	0.0601	2,381.8329
Total	**0.9975**	**3.4143**	**9.2157**	**0.0372**	**3.3402**	**0.0317**	**3.3719**	**0.8976**	**0.0299**	**0.9274**		**3,866.4578**	**3,866.4578**	**0.1304**	**0.2852**	**3,954.6914**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8673	16.2931	18.1961	0.0345		0.6835	0.6835		0.6506	0.6506		3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**1.8673**	**16.2931**	**18.1961**	**0.0345**		**0.6835**	**0.6835**		**0.6506**	**0.6506**		**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

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

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0719	2.8331	1.0142	0.0136	0.5143	0.0172	0.5315	0.1480	0.0164	0.1645		1,476.7137	1,476.7137	0.0663	0.2208	1,544.1743
Worker	0.8650	0.4947	7.6465	0.0226	2.8259	0.0139	2.8398	0.7496	0.0128	0.7623		2,280.9949	2,280.9949	0.0599	0.0563	2,299.2745
Total	**0.9369**	**3.3278**	**8.6606**	**0.0361**	**3.3402**	**0.0311**	**3.3713**	**0.8976**	**0.0292**	**0.9268**		**3,757.7085**	**3,757.7085**	**0.1262**	**0.2771**	**3,843.4488**

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	0.4186	3.4421	20.3015	0.0345		0.0500	0.0500		0.0500	0.0500	0.0000	3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**0.4186**	**3.4421**	**20.3015**	**0.0345**		**0.0500**	**0.0500**		**0.0500**	**0.0500**	**0.0000**	**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

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

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0719	2.8331	1.0142	0.0136	0.5143	0.0172	0.5315	0.1480	0.0164	0.1645		1,476.7137	1,476.7137	0.0663	0.2208	1,544.1743
Worker	0.8650	0.4947	7.6465	0.0226	2.8259	0.0139	2.8398	0.7496	0.0128	0.7623		2,280.9949	2,280.9949	0.0599	0.0563	2,299.2745
Total	**0.9369**	**3.3278**	**8.6606**	**0.0361**	**3.3402**	**0.0311**	**3.3713**	**0.8976**	**0.0292**	**0.9268**		**3,757.7085**	**3,757.7085**	**0.1262**	**0.2771**	**3,843.4488**

3.5 Building Construction - 2026

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	1.8673	16.2931	18.1961	0.0345		0.6835	0.6835		0.6506	0.6506		3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**1.8673**	**16.2931**	**18.1961**	**0.0345**		**0.6835**	**0.6835**		**0.6506**	**0.6506**		**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

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

3.5 Building Construction - 2026

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	0.0705	2.7976	1.0128	0.0133	0.5144	0.0171	0.5315	0.1481	0.0164	0.1644		1,449.3205	1,449.3205	0.0680	0.2166	1,515.5807
Worker	0.8125	0.4500	7.1798	0.0219	2.8259	0.0132	2.8391	0.7496	0.0121	0.7617		2,208.9176	2,208.9176	0.0547	0.0531	2,226.1172
Total	**0.8829**	**3.2475**	**8.1926**	**0.0351**	**3.3402**	**0.0303**	**3.3705**	**0.8976**	**0.0285**	**0.9261**		**3,658.2381**	**3,658.2381**	**0.1227**	**0.2698**	**3,741.6979**

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	0.4186	3.4421	20.3015	0.0345		0.0500	0.0500		0.0500	0.0500	0.0000	3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**0.4186**	**3.4421**	**20.3015**	**0.0345**		**0.0500**	**0.0500**		**0.0500**	**0.0500**	**0.0000**	**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

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

3.5 Building Construction - 2026

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	0.0705	2.7976	1.0128	0.0133	0.5144	0.0171	0.5315	0.1481	0.0164	0.1644		1,449.3205	1,449.3205	0.0680	0.2166	1,515.5807
Worker	0.8125	0.4500	7.1798	0.0219	2.8259	0.0132	2.8391	0.7496	0.0121	0.7617		2,208.9176	2,208.9176	0.0547	0.0531	2,226.1172
Total	**0.8829**	**3.2475**	**8.1926**	**0.0351**	**3.3402**	**0.0303**	**3.3705**	**0.8976**	**0.0285**	**0.9261**		**3,658.2381**	**3,658.2381**	**0.1227**	**0.2698**	**3,741.6979**

3.6 Architectural Coating - 2026

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	19.1390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**19.3098**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

3.6 Architectural Coating - 2026

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	0.1630	0.0903	1.4401	4.3800e-003	0.5668	2.6400e-003	0.5695	0.1504	2.4300e-003	0.1528		443.0678	443.0678	0.0110	0.0107	446.5177
Total	**0.1630**	**0.0903**	**1.4401**	**4.3800e-003**	**0.5668**	**2.6400e-003**	**0.5695**	**0.1504**	**2.4300e-003**	**0.1528**		**443.0678**	**443.0678**	**0.0110**	**0.0107**	**446.5177**

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	19.1390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**19.1687**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

3.6 Architectural Coating - 2026

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	0.1630	0.0903	1.4401	4.3800e-003	0.5668	2.6400e-003	0.5695	0.1504	2.4300e-003	0.1528		443.0678	443.0678	0.0110	0.0107	446.5177
Total	**0.1630**	**0.0903**	**1.4401**	**4.3800e-003**	**0.5668**	**2.6400e-003**	**0.5695**	**0.1504**	**2.4300e-003**	**0.1528**		**443.0678**	**443.0678**	**0.0110**	**0.0107**	**446.5177**

3.7 Paving - 2026

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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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

3.7 Paving - 2026

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	0.0354	0.0196	0.3131	9.5000e-004	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		96.3191	96.3191	2.3800e-003	2.3200e-003	97.0691
Total	**0.0354**	**0.0196**	**0.3131**	**9.5000e-004**	**0.1232**	**5.7000e-004**	**0.1238**	**0.0327**	**5.3000e-004**	**0.0332**		**96.3191**	**96.3191**	**2.3800e-003**	**2.3200e-003**	**97.0691**

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	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2805**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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

3.7 Paving - 2026

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	0.0354	0.0196	0.3131	9.5000e-004	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		96.3191	96.3191	2.3800e-003	2.3200e-003	97.0691
Total	**0.0354**	**0.0196**	**0.3131**	**9.5000e-004**	**0.1232**	**5.7000e-004**	**0.1238**	**0.0327**	**5.3000e-004**	**0.0332**		**96.3191**	**96.3191**	**2.3800e-003**	**2.3200e-003**	**97.0691**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Latigo Hillcrest Mixed Use Project - Ventura County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.6231	4.5656	38.9606	0.0837	9.5936	0.0642	9.6577	2.5573	0.0599	2.6171		8,516.8975	8,516.8975	0.5565	0.3830	8,644.9415
Unmitigated	4.6231	4.5656	38.9606	0.0837	9.5936	0.0642	9.6577	2.5573	0.0599	2.6171		8,516.8975	8,516.8975	0.5565	0.3830	8,644.9415

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,471.86	1,471.86	1471.86	4,066,856	4,066,856
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	314.98	314.98	314.98	485,078	485,078
Total	1,786.84	1,786.84	1,786.84	4,551,934	4,551,934

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
Apartments Mid Rise	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303
Enclosed Parking with Elevator	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303
Parking Lot	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303
Strip Mall	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1100	0.9403	0.4013	6.0000e-003		0.0760	0.0760		0.0760	0.0760		1,200.1194	1,200.1194	0.0230	0.0220	1,207.2511
NaturalGas Unmitigated	0.1100	0.9403	0.4013	6.0000e-003		0.0760	0.0760		0.0760	0.0760		1,200.1194	1,200.1194	0.0230	0.0220	1,207.2511

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	10172.1	0.1097	0.9374	0.3989	5.9800e-003		0.0758	0.0758		0.0758	0.0758		1,196.7199	1,196.7199	0.0229	0.0219	1,203.8314
Enclosed Parking with Elevator	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
Strip Mall	28.8959	3.1000e-004	2.8300e-003	2.3800e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.3995	3.3995	7.0000e-005	6.0000e-005	3.4197
Total		**0.1100**	**0.9403**	**0.4013**	**6.0000e-003**		**0.0760**	**0.0760**		**0.0760**	**0.0760**		**1,200.1194**	**1,200.1194**	**0.0230**	**0.0220**	**1,207.2511**

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	10.1721	0.1097	0.9374	0.3989	5.9800e-003		0.0758	0.0758		0.0758	0.0758		1,196.7199	1,196.7199	0.0229	0.0219	1,203.8314
Enclosed Parking with Elevator	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
Strip Mall	0.0288959	3.1000e-004	2.8300e-003	2.3800e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.3995	3.3995	7.0000e-005	6.0000e-005	3.4197
Total		**0.1100**	**0.9403**	**0.4013**	**6.0000e-003**		**0.0760**	**0.0760**		**0.0760**	**0.0760**		**1,200.1194**	**1,200.1194**	**0.0230**	**0.0220**	**1,207.2511**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.9651	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525	0.0000	49.5962	49.5962	0.0477	0.0000	50.7889
Unmitigated	10.9651	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525	0.0000	49.5962	49.5962	0.0477	0.0000	50.7889

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	0.7603					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.8296	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525		49.5962	49.5962	0.0477		50.7889
Total	**10.9651**	**0.3167**	**27.5066**	**1.4600e-003**		**0.1525**	**0.1525**		**0.1525**	**0.1525**	**0.0000**	**49.5962**	**49.5962**	**0.0477**	**0.0000**	**50.7889**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7603					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.8296	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525		49.5962	49.5962	0.0477		50.7889
Total	**10.9651**	**0.3167**	**27.5066**	**1.4600e-003**		**0.1525**	**0.1525**		**0.1525**	**0.1525**	**0.0000**	**49.5962**	**49.5962**	**0.0477**	**0.0000**	**50.7889**

7.0 Water Detail

7.1 Mitigation Measures Water

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

Latigo Hillcrest Mixed Use Project

Ventura County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	462.00	Space	0.00	195,874.00	0
Parking Lot	119.00	Space	0.00	47,600.00	0
Apartments Mid Rise	333.00	Dwelling Unit	8.28	428,763.00	1019
Strip Mall	5.30	1000sqft	0.00	5,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2026
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 - 8.28 ac lot. 333-unit apt: 428,763 gross sf res. 5.3k commercial. 462 space garage 195,874 sf. 119 space parking lot.

Construction Phase - Contractor info. 20 demo, no prep, 65 grad, 665 bldg, pav 20, 145 coat. overlap pav and coat with bldg.

Off-road Equipment -

Off-road Equipment - 2 crane, 4 forklift, 2 generator, 2 welders

Off-road Equipment - 1 concrete saw, 1 excavator, 1 dozer, 1 skid steer

Off-road Equipment - 1 excavator, 1 dozer, 1 loader, 1 backhoe

Off-road Equipment -

Off-road Equipment - No site prep phase

Latigo Hillcrest Mixed Use Project - Ventura County, Winter

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

Trips and VMT - 18 cy belly dump trucks = 1,869 trips for demo debris (8,140 tons = 33,636cy), 2,672 trips for export (48,100cy)

Demolition - 8,140 tons building and pavement debris

Grading - 35ac grading, combo of default 20 grading and 15 site prep. 48,100cy export

Architectural Coating - 50 g/L VOC VCAPCD rule 74.2

Vehicle Trips - Traffic study ADT- Housing 1,473 ADT (/333 = 4.42), Comm 315 ADT (/5.3 = 59.43)

Area Coating - rule 74.2

Water And Wastewater - Hill Canyon treatment plant

Construction Off-road Equipment Mitigation - Tier 4 Final

Area Mitigation - Rule 74.2

Woodstoves - no hearths

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	75.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Residential_Exterior	100	50
tblAreaCoating	Area_EF_Residential_Interior	75	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	20.00	65.00
tblConstructionPhase	NumDays	230.00	665.00
tblConstructionPhase	NumDays	20.00	145.00
tblConstructionPhase	PhaseEndDate	1/5/2024	12/22/2023
tblConstructionPhase	PhaseEndDate	2/2/2024	3/29/2024
tblConstructionPhase	PhaseEndDate	12/20/2024	10/16/2026
tblConstructionPhase	PhaseEndDate	2/14/2025	12/18/2026
tblConstructionPhase	PhaseEndDate	1/17/2025	10/16/2026
tblConstructionPhase	PhaseStartDate	1/6/2024	1/1/2024
tblConstructionPhase	PhaseStartDate	2/3/2024	4/1/2024
tblConstructionPhase	PhaseStartDate	1/18/2025	6/1/2026

Latigo Hillcrest Mixed Use Project - Ventura County, Winter

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

tblConstructionPhase	PhaseStartDate	12/21/2024	9/21/2026
tblGrading	AcresOfGrading	32.50	35.00
tblGrading	MaterialExported	0.00	48,100.00
tblLandUse	LandUseSquareFeet	184,800.00	195,874.00
tblLandUse	LandUseSquareFeet	333,000.00	428,763.00
tblLandUse	LotAcreage	4.16	0.00
tblLandUse	LotAcreage	1.07	0.00
tblLandUse	LotAcreage	8.76	8.28
tblLandUse	LotAcreage	0.12	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblTripsAndVMT	HaulingTripNumber	805.00	1,869.00
tblTripsAndVMT	HaulingTripNumber	6,013.00	2,672.00
tblVehicleTrips	ST_TR	4.91	4.42
tblVehicleTrips	ST_TR	42.04	59.43
tblVehicleTrips	SU_TR	4.09	4.42

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

tblVehicleTrips	SU_TR	20.43	59.43
tblVehicleTrips	WD_TR	5.44	4.42
tblVehicleTrips	WD_TR	44.32	59.43
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

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	1.4797	23.8312	14.8876	0.0754	10.5317	0.6373	11.1690	1.8041	0.5997	2.4037	0.0000	8,041.5548	8,041.5548	0.9228	0.9346	8,343.1347
2024	3.0693	21.1519	27.4314	0.0707	7.4970	0.8075	8.0571	3.6060	0.7688	4.1227	0.0000	6,997.7137	6,997.7137	0.8065	0.4057	7,103.2483
2025	2.8735	19.8312	26.7764	0.0697	3.3402	0.7146	4.0548	0.8976	0.6799	1.5775	0.0000	6,892.7213	6,892.7213	0.7248	0.2839	6,995.4354
2026	23.2572	29.5980	44.4417	0.0996	4.0303	1.1871	5.2174	1.0806	1.1187	2.1993	0.0000	9,800.8614	9,800.8614	1.4646	0.2906	9,924.0597
Maximum	**23.2572**	**29.5980**	**44.4417**	**0.0996**	**10.5317**	**1.1871**	**11.1690**	**3.6060**	**1.1187**	**4.1227**	**0.0000**	**9,800.8614**	**9,800.8614**	**1.4646**	**0.9346**	**9,924.0597**

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

2.1 Overall Construction (Maximum Daily Emission)

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	0.4892	13.8671	16.6597	0.0754	5.6817	0.1173	5.7991	1.0696	0.1137	1.1833	0.0000	8,041.5548	8,041.5548	0.9228	0.9346	8,343.1347
2024	1.4887	7.0769	29.4148	0.0707	3.8136	0.0818	3.8830	1.7428	0.0799	1.8107	0.0000	6,997.7137	6,997.7137	0.8065	0.4057	7,103.2483
2025	1.4248	6.9803	28.8818	0.0697	3.3402	0.0811	3.4213	0.8976	0.0793	0.9769	0.0000	6,892.7213	6,892.7213	0.7248	0.2839	6,995.4354
2026	21.0326	8.3641	49.2881	0.0996	4.0303	0.1249	4.1552	1.0806	0.1229	1.2035	0.0000	9,800.8614	9,800.8614	1.4646	0.2906	9,924.0597
Maximum	**21.0326**	**13.8671**	**49.2881**	**0.0996**	**5.6817**	**0.1249**	**5.7991**	**1.7428**	**0.1229**	**1.8107**	**0.0000**	**9,800.8614**	**9,800.8614**	**1.4646**	**0.9346**	**9,924.0597**

	ROG	NOx	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	**20.35**	**61.56**	**-9.43**	**0.00**	**33.60**	**87.89**	**39.44**	**35.16**	**87.50**	**49.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.9651	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525	0.0000	49.5962	49.5962	0.0477	0.0000	50.7889
Energy	0.1100	0.9403	0.4013	6.0000e-003		0.0760	0.0760		0.0760	0.0760		1,200.1194	1,200.1194	0.0230	0.0220	1,207.2511
Mobile	4.4719	5.0387	41.5381	0.0809	9.5936	0.0642	9.6577	2.5573	0.0599	2.6171		8,234.9648	8,234.9648	0.6031	0.4095	8,372.0629
Total	**15.5470**	**6.2957**	**69.4460**	**0.0883**	**9.5936**	**0.2927**	**9.8863**	**2.5573**	**0.2884**	**2.8457**	**0.0000**	**9,484.6804**	**9,484.6804**	**0.6738**	**0.4315**	**9,630.1029**

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	10.9651	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525	0.0000	49.5962	49.5962	0.0477	0.0000	50.7889
Energy	0.1100	0.9403	0.4013	6.0000e-003		0.0760	0.0760		0.0760	0.0760		1,200.1194	1,200.1194	0.0230	0.0220	1,207.2511
Mobile	4.4719	5.0387	41.5381	0.0809	9.5936	0.0642	9.6577	2.5573	0.0599	2.6171		8,234.9648	8,234.9648	0.6031	0.4095	8,372.0629
Total	**15.5470**	**6.2957**	**69.4460**	**0.0883**	**9.5936**	**0.2927**	**9.8863**	**2.5573**	**0.2884**	**2.8457**	**0.0000**	**9,484.6804**	**9,484.6804**	**0.6738**	**0.4315**	**9,630.1029**

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

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/27/2023	12/22/2023	5	20	
2	Site Preparation	Site Preparation	12/23/2023	12/22/2023	5	0	
3	Grading	Grading	1/1/2024	3/29/2024	5	65	
4	Building Construction	Building Construction	4/1/2024	10/16/2026	5	665	
5	Architectural Coating	Architectural Coating	6/1/2026	12/18/2026	5	145	
6	Paving	Paving	9/21/2026	10/16/2026	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 35

Acres of Paving: 0

Residential Indoor: 868,245; Residential Outdoor: 289,415; Non-Residential Indoor: 7,950; Non-Residential Outdoor: 2,650; Striped Parking Area: 14,608 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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

Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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	4	10.00	0.00	1,869.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,672.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	344.00	76.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	69.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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

Water Exposed Area

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					8.8181	0.0000	8.8181	1.3354	0.0000	1.3354			0.0000			0.0000
Off-Road	1.2719	12.1212	11.4013	0.0220		0.5541	0.5541		0.5201	0.5201		2,119.4455	2,119.4455	0.5230		2,132.5203
Total	**1.2719**	**12.1212**	**11.4013**	**0.0220**	**8.8181**	**0.5541**	**9.3722**	**1.3354**	**0.5201**	**1.8554**		**2,119.4455**	**2,119.4455**	**0.5230**		**2,132.5203**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	0.1768	11.6892	3.2350	0.0527	1.6314	0.0828	1.7142	0.4469	0.0792	0.5261		5,854.3274	5,854.3274	0.3975	0.9325	6,142.1545
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	0.0311	0.0208	0.2514	6.7000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		67.7819	67.7819	2.2900e-003	2.0800e-003	68.4600
Total	**0.2078**	**11.7100**	**3.4864**	**0.0534**	**1.7136**	**0.0832**	**1.7968**	**0.4687**	**0.0796**	**0.5483**		**5,922.1093**	**5,922.1093**	**0.3998**	**0.9346**	**6,210.6145**

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					3.9681	0.0000	3.9681	0.6009	0.0000	0.6009			0.0000			0.0000
Off-Road	0.2814	2.1570	13.1733	0.0220		0.0341	0.0341		0.0341	0.0341	0.0000	2,119.4455	2,119.4455	0.5230		2,132.5203
Total	**0.2814**	**2.1570**	**13.1733**	**0.0220**	**3.9681**	**0.0341**	**4.0023**	**0.6009**	**0.0341**	**0.6351**	**0.0000**	**2,119.4455**	**2,119.4455**	**0.5230**		**2,132.5203**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	0.1768	11.6892	3.2350	0.0527	1.6314	0.0828	1.7142	0.4469	0.0792	0.5261		5,854.3274	5,854.3274	0.3975	0.9325	6,142.1545
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	0.0311	0.0208	0.2514	6.7000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		67.7819	67.7819	2.2900e-003	2.0800e-003	68.4600
Total	**0.2078**	**11.7100**	**3.4864**	**0.0534**	**1.7136**	**0.0832**	**1.7968**	**0.4687**	**0.0796**	**0.5483**		**5,922.1093**	**5,922.1093**	**0.3998**	**0.9346**	**6,210.6145**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6971	0.0000	6.6971	3.3876	0.0000	3.3876			0.0000			0.0000
Off-Road	1.1632	11.4270	10.8673	0.0199		0.5232	0.5232		0.4813	0.4813		1,930.7799	1,930.7799	0.6245		1,946.3912
Total	**1.1632**	**11.4270**	**10.8673**	**0.0199**	**6.6971**	**0.5232**	**7.2203**	**3.3876**	**0.4813**	**3.8690**		**1,930.7799**	**1,930.7799**	**0.6245**		**1,946.3912**

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

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0772	5.0966	1.4648	0.0228	0.7177	0.0365	0.7542	0.1966	0.0349	0.2315		2,532.9178	2,532.9178	0.1800	0.4038	2,657.7354
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	0.0291	0.0187	0.2344	6.5000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		65.7045	65.7045	2.0900e-003	1.9400e-003	66.3357
Total	**0.1063**	**5.1153**	**1.6991**	**0.0234**	**0.7999**	**0.0369**	**0.8368**	**0.2184**	**0.0353**	**0.2537**		**2,598.6223**	**2,598.6223**	**0.1821**	**0.4057**	**2,724.0711**

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					3.0137	0.0000	3.0137	1.5244	0.0000	1.5244			0.0000			0.0000
Off-Road	0.2441	1.0575	12.4357	0.0199		0.0325	0.0325		0.0325	0.0325	0.0000	1,930.7799	1,930.7799	0.6245		1,946.3912
Total	**0.2441**	**1.0575**	**12.4357**	**0.0199**	**3.0137**	**0.0325**	**3.0462**	**1.5244**	**0.0325**	**1.5570**	**0.0000**	**1,930.7799**	**1,930.7799**	**0.6245**		**1,946.3912**

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

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0772	5.0966	1.4648	0.0228	0.7177	0.0365	0.7542	0.1966	0.0349	0.2315		2,532.9178	2,532.9178	0.1800	0.4038	2,657.7354
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	0.0291	0.0187	0.2344	6.5000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		65.7045	65.7045	2.0900e-003	1.9400e-003	66.3357
Total	**0.1063**	**5.1153**	**1.6991**	**0.0234**	**0.7999**	**0.0369**	**0.8368**	**0.2184**	**0.0353**	**0.2537**		**2,598.6223**	**2,598.6223**	**0.1821**	**0.4057**	**2,724.0711**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9991	17.5172	18.3181	0.0345		0.7756	0.7756		0.7389	0.7389		3,231.0608	3,231.0608	0.6006		3,246.0748
Total	**1.9991**	**17.5172**	**18.3181**	**0.0345**		**0.7756**	**0.7756**		**0.7389**	**0.7389**		**3,231.0608**	**3,231.0608**	**0.6006**		**3,246.0748**

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

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0707	2.9926	1.0502	0.0139	0.5143	0.0173	0.5316	0.1480	0.0165	0.1645		1,506.4179	1,506.4179	0.0642	0.2255	1,575.2252
Worker	0.9995	0.6421	8.0631	0.0224	2.8259	0.0146	2.8405	0.7496	0.0134	0.7630		2,260.2350	2,260.2350	0.0719	0.0668	2,281.9483
Total	**1.0701**	**3.6348**	**9.1133**	**0.0362**	**3.3402**	**0.0318**	**3.3720**	**0.8976**	**0.0299**	**0.9275**		**3,766.6529**	**3,766.6529**	**0.1361**	**0.2923**	**3,857.1735**

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	0.4186	3.4421	20.3015	0.0345		0.0500	0.0500		0.0500	0.0500	0.0000	3,231.0608	3,231.0608	0.6006		3,246.0748
Total	**0.4186**	**3.4421**	**20.3015**	**0.0345**		**0.0500**	**0.0500**		**0.0500**	**0.0500**	**0.0000**	**3,231.0608**	**3,231.0608**	**0.6006**		**3,246.0748**

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

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0707	2.9926	1.0502	0.0139	0.5143	0.0173	0.5316	0.1480	0.0165	0.1645		1,506.4179	1,506.4179	0.0642	0.2255	1,575.2252
Worker	0.9995	0.6421	8.0631	0.0224	2.8259	0.0146	2.8405	0.7496	0.0134	0.7630		2,260.2350	2,260.2350	0.0719	0.0668	2,281.9483
Total	**1.0701**	**3.6348**	**9.1133**	**0.0362**	**3.3402**	**0.0318**	**3.3720**	**0.8976**	**0.0299**	**0.9275**		**3,766.6529**	**3,766.6529**	**0.1361**	**0.2923**	**3,857.1735**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8673	16.2931	18.1961	0.0345		0.6835	0.6835		0.6506	0.6506		3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**1.8673**	**16.2931**	**18.1961**	**0.0345**		**0.6835**	**0.6835**		**0.6506**	**0.6506**		**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

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

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0689	2.9591	1.0460	0.0136	0.5143	0.0173	0.5316	0.1480	0.0165	0.1646		1,478.9618	1,478.9618	0.0660	0.2213	1,546.5617
Worker	0.9373	0.5791	7.5343	0.0216	2.8259	0.0139	2.8398	0.7496	0.0128	0.7623		2,182.6657	2,182.6657	0.0655	0.0626	2,202.9483
Total	**1.0062**	**3.5382**	**8.5803**	**0.0352**	**3.3402**	**0.0311**	**3.3714**	**0.8976**	**0.0293**	**0.9269**		**3,661.6275**	**3,661.6275**	**0.1315**	**0.2839**	**3,749.5099**

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	0.4186	3.4421	20.3015	0.0345		0.0500	0.0500		0.0500	0.0500	0.0000	3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**0.4186**	**3.4421**	**20.3015**	**0.0345**		**0.0500**	**0.0500**		**0.0500**	**0.0500**	**0.0000**	**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

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

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0689	2.9591	1.0460	0.0136	0.5143	0.0173	0.5316	0.1480	0.0165	0.1646		1,478.9618	1,478.9618	0.0660	0.2213	1,546.5617
Worker	0.9373	0.5791	7.5343	0.0216	2.8259	0.0139	2.8398	0.7496	0.0128	0.7623		2,182.6657	2,182.6657	0.0655	0.0626	2,202.9483
Total	**1.0062**	**3.5382**	**8.5803**	**0.0352**	**3.3402**	**0.0311**	**3.3714**	**0.8976**	**0.0293**	**0.9269**		**3,661.6275**	**3,661.6275**	**0.1315**	**0.2839**	**3,749.5099**

3.5 Building Construction - 2026

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	1.8673	16.2931	18.1961	0.0345		0.6835	0.6835		0.6506	0.6506		3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**1.8673**	**16.2931**	**18.1961**	**0.0345**		**0.6835**	**0.6835**		**0.6506**	**0.6506**		**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

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

3.5 Building Construction - 2026

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	0.0673	2.9226	1.0443	0.0133	0.5144	0.0172	0.5315	0.1481	0.0164	0.1645		1,451.5821	1,451.5821	0.0678	0.2171	1,517.9795
Worker	0.8821	0.5266	7.0844	0.0209	2.8259	0.0132	2.8391	0.7496	0.0121	0.7617		2,113.8256	2,113.8256	0.0599	0.0590	2,132.9085
Total	**0.9494**	**3.4492**	**8.1286**	**0.0342**	**3.3402**	**0.0304**	**3.3706**	**0.8976**	**0.0286**	**0.9262**		**3,565.4077**	**3,565.4077**	**0.1277**	**0.2761**	**3,650.8880**

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	0.4186	3.4421	20.3015	0.0345		0.0500	0.0500		0.0500	0.0500	0.0000	3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**0.4186**	**3.4421**	**20.3015**	**0.0345**		**0.0500**	**0.0500**		**0.0500**	**0.0500**	**0.0000**	**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

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

3.5 Building Construction - 2026

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	0.0673	2.9226	1.0443	0.0133	0.5144	0.0172	0.5315	0.1481	0.0164	0.1645		1,451.5821	1,451.5821	0.0678	0.2171	1,517.9795
Worker	0.8821	0.5266	7.0844	0.0209	2.8259	0.0132	2.8391	0.7496	0.0121	0.7617		2,113.8256	2,113.8256	0.0599	0.0590	2,132.9085
Total	**0.9494**	**3.4492**	**8.1286**	**0.0342**	**3.3402**	**0.0304**	**3.3706**	**0.8976**	**0.0286**	**0.9262**		**3,565.4077**	**3,565.4077**	**0.1277**	**0.2761**	**3,650.8880**

3.6 Architectural Coating - 2026

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	19.1390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**19.3098**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

3.6 Architectural Coating - 2026

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	0.1769	0.1056	1.4210	4.1900e-003	0.5668	2.6400e-003	0.5695	0.1504	2.4300e-003	0.1528		423.9941	423.9941	0.0120	0.0118	427.8218
Total	**0.1769**	**0.1056**	**1.4210**	**4.1900e-003**	**0.5668**	**2.6400e-003**	**0.5695**	**0.1504**	**2.4300e-003**	**0.1528**		**423.9941**	**423.9941**	**0.0120**	**0.0118**	**427.8218**

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	19.1390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**19.1687**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

3.6 Architectural Coating - 2026

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	0.1769	0.1056	1.4210	4.1900e-003	0.5668	2.6400e-003	0.5695	0.1504	2.4300e-003	0.1528		423.9941	423.9941	0.0120	0.0118	427.8218
Total	**0.1769**	**0.1056**	**1.4210**	**4.1900e-003**	**0.5668**	**2.6400e-003**	**0.5695**	**0.1504**	**2.4300e-003**	**0.1528**		**423.9941**	**423.9941**	**0.0120**	**0.0118**	**427.8218**

3.7 Paving - 2026

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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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

3.7 Paving - 2026

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	0.0385	0.0230	0.3089	9.1000e-004	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		92.1726	92.1726	2.6100e-003	2.5700e-003	93.0047
Total	**0.0385**	**0.0230**	**0.3089**	**9.1000e-004**	**0.1232**	**5.7000e-004**	**0.1238**	**0.0327**	**5.3000e-004**	**0.0332**		**92.1726**	**92.1726**	**2.6100e-003**	**2.5700e-003**	**93.0047**

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	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2805**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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

3.7 Paving - 2026

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	0.0385	0.0230	0.3089	9.1000e-004	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		92.1726	92.1726	2.6100e-003	2.5700e-003	93.0047
Total	**0.0385**	**0.0230**	**0.3089**	**9.1000e-004**	**0.1232**	**5.7000e-004**	**0.1238**	**0.0327**	**5.3000e-004**	**0.0332**		**92.1726**	**92.1726**	**2.6100e-003**	**2.5700e-003**	**93.0047**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.4719	5.0387	41.5381	0.0809	9.5936	0.0642	9.6577	2.5573	0.0599	2.6171		8,234.9648	8,234.9648	0.6031	0.4095	8,372.0629
Unmitigated	4.4719	5.0387	41.5381	0.0809	9.5936	0.0642	9.6577	2.5573	0.0599	2.6171		8,234.9648	8,234.9648	0.6031	0.4095	8,372.0629

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,471.86	1,471.86	1471.86	4,066,856	4,066,856
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	314.98	314.98	314.98	485,078	485,078
Total	1,786.84	1,786.84	1,786.84	4,551,934	4,551,934

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
Apartments Mid Rise	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303
Enclosed Parking with Elevator	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303
Parking Lot	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303
Strip Mall	0.557690	0.058632	0.169429	0.125206	0.026282	0.007463	0.012467	0.006253	0.000668	0.000389	0.028591	0.000628	0.006303

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1100	0.9403	0.4013	6.0000e-003		0.0760	0.0760		0.0760	0.0760		1,200.1194	1,200.1194	0.0230	0.0220	1,207.2511
NaturalGas Unmitigated	0.1100	0.9403	0.4013	6.0000e-003		0.0760	0.0760		0.0760	0.0760		1,200.1194	1,200.1194	0.0230	0.0220	1,207.2511

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	10172.1	0.1097	0.9374	0.3989	5.9800e-003		0.0758	0.0758		0.0758	0.0758		1,196.7199	1,196.7199	0.0229	0.0219	1,203.8314
Enclosed Parking with Elevator	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
Strip Mall	28.8959	3.1000e-004	2.8300e-003	2.3800e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.3995	3.3995	7.0000e-005	6.0000e-005	3.4197
Total		**0.1100**	**0.9403**	**0.4013**	**6.0000e-003**		**0.0760**	**0.0760**		**0.0760**	**0.0760**		**1,200.1194**	**1,200.1194**	**0.0230**	**0.0220**	**1,207.2511**

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	10.1721	0.1097	0.9374	0.3989	5.9800e-003		0.0758	0.0758		0.0758	0.0758		1,196.7199	1,196.7199	0.0229	0.0219	1,203.8314
Enclosed Parking with Elevator	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
Strip Mall	0.0288959	3.1000e-004	2.8300e-003	2.3800e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.3995	3.3995	7.0000e-005	6.0000e-005	3.4197
Total		**0.1100**	**0.9403**	**0.4013**	**6.0000e-003**		**0.0760**	**0.0760**		**0.0760**	**0.0760**		**1,200.1194**	**1,200.1194**	**0.0230**	**0.0220**	**1,207.2511**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.9651	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525	0.0000	49.5962	49.5962	0.0477	0.0000	50.7889
Unmitigated	10.9651	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525	0.0000	49.5962	49.5962	0.0477	0.0000	50.7889

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	0.7603					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.8296	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525		49.5962	49.5962	0.0477		50.7889
Total	**10.9651**	**0.3167**	**27.5066**	**1.4600e-003**		**0.1525**	**0.1525**		**0.1525**	**0.1525**	**0.0000**	**49.5962**	**49.5962**	**0.0477**	**0.0000**	**50.7889**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7603					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.8296	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525		49.5962	49.5962	0.0477		50.7889
Total	**10.9651**	**0.3167**	**27.5066**	**1.4600e-003**		**0.1525**	**0.1525**		**0.1525**	**0.1525**	**0.0000**	**49.5962**	**49.5962**	**0.0477**	**0.0000**	**50.7889**

7.0 Water Detail

7.1 Mitigation Measures Water

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B

Fuel Consumption Worksheets

Mobile Fuel Consumption Worksheet
Latigo Hillcrest Project

Demolition			
diesel	**MT CO2**	**gasoline**	**MT CO2**
off road	19.35	worker trips	0.63
hauling	55.69		
Subtotal	**75.04**	**Subtotal**	**0.63**

Site Preparation			
diesel	**MT CO2**	**gasoline**	**MT CO2**
off road	0.00	worker trips	0.00
hauling	0.00		
Subtotal	**0.00**	**Subtotal**	**0.00**

Grading			
diesel	**MT CO2**	**gasoline**	**MT CO2**
off road	57.39	worker trips	1.97
hauling	78.32		
Subtotal	**135.71**	**Subtotal**	**1.97**

Building			
diesel	**MT CO2**	**gasoline**	**MT CO2**
off road	979.11	worker trips	669.48
vendor	465.97		
Subtotal	**1445.08**	**Subtotal**	**669.48**

Paving			
diesel	**MT CO2**	**gasoline**	**MT CO2**
off road	20.18	worker trips	0.85
hauling	0.00		
Subtotal	**20.18**	**Subtotal**	**0.85**

Coating			
diesel	**MT CO2**	**gasoline**	**MT CO2**
off road	18.54	worker trips	28.33
Subtotal	**18.54**	**Subtotal**	**28.33**

	MT CO2	**lbs CO2**	lbs per gallon
Total Diesel CO2	1694.55	3,735,844	22.4
(assumes vendors use diesel)			
Total Gasoline CO2	701.26	1,546,014	19.6
Total Diesel Gallons	**166,779**		
Total Gasoline Gallons	**78,878**		

	MT CO2	lbs CO2	Total gallons
On-road Haul Trucks	134.01	295,442	13,189
On-road Vendor Trucks	465.97	1,027,288	45,861
Off-road Equipment	1094.57	2,413,114	107,728

Operations Mobile Energy Use		
	Miles	Gallons
Light duty, 91% VMT*	4,142,260	162,060
Heavy duty, 9% VMT	409,674	40,243

MTCO2 emissions for each phase as reported in CalEEMod "Annual" output sheets from CalEEMod.2020.4.0
*VMT as calculated by CalEEMod Annual output
lbs per gallon factors from U.S. Energy Information Administration, Environment Carbon Dioxide Emissions Coefficients, Release date: February 2, 201

Construction Electricity Consumption Worksheet
Latigo Hillcrest Project

Water usage during construction			
Phase	Acres graded (1)	Gallons (2)	kWh (3)
Grading	35	105,700.00	1028.14

1. Based on total acres of grading as calculated by CalEEMod.
2. Water usage rate for dust control is based on a 3x daily application rate that amounts to 3,020 gal/acre from: Air & Waste Management Association, Air Pollution Engineering Manual (1992 Edition).
3. Each gallon of delivered water for outdoor use in Southern California is associated with 0.009727 kWh of electricity. Source: CalEEMod 2020 default

Mobile Office Energy Use			
	kWh/yr	KwH daily	Days in use
Mobile Office yearly*	3,590.00	9.84	795
		Total kWh	7819.32

* CalEEMod 2022.1 Yearly electricity use for 1 "mobile home park"

Total Construction Electricity **8,847.46 kWh**

-

April 3, 2023

Envicom Corporation
4165 East Thousand Oaks Boulevard, Suite 290
Westlake Village, California 91362
Attn: Laura Kaufman

Re: Latigo Hillcrest Mixed-Use Project: Construction Health Risk Assessment

Ms. Kaufman:

Per your request, Air Quality Dynamics has prepared a health risk assessment (HRA) to quantify the impact of diesel particulate matter (DPM), which is identified as a toxic air contaminant pursuant to California Code of Regulations Section 93001, associated with the generation of off-road equipment emissions during construction of the proposed Project. This was done to supplement the Air Quality Assessment prepared by Envicom Corporation which evaluated criteria pollutant exposures associated with Project construction.

The HRA quantifies both carcinogenic risks and noncarcinogenic hazards for the maximum exposed residential receptors adjoining the project site. To ensure a viable quantification of exposure, the technical approach used in the preparation of the HRA was composed of all relevant and appropriate assessment and dispersion modeling methodologies presented by the U.S. Environmental Protection Agency, California Environmental Protection Agency and Ventura County Air Pollution Control District (VCAPCD).

Results of the HRA showed that carcinogenic risk and noncarcinogenic hazard estimates for the maximum exposed residential receptor did not exceed identified significance thresholds. The following discussion outlines the methodology utilized to conduct the HRA and summarizes the protocol used to evaluate DPM exposures.

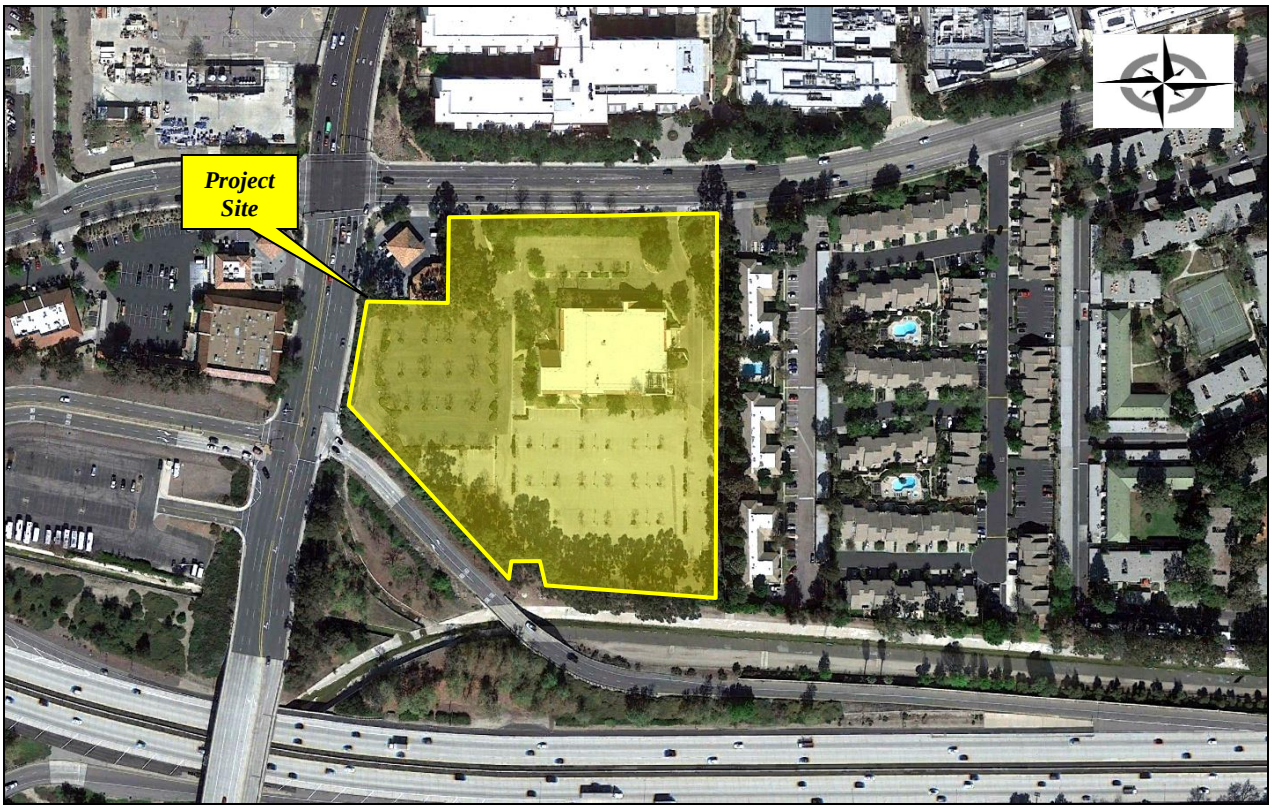
Source Identification

The Project proposes the demolition of an existing office building, surface parking lot and associated landscape improvements to accommodate the construction of a mixed-use development consisting of 333 dwelling units and 5,300 square feet of commercial space. The 333 dwelling units would be distributed across 2 separate podium buildings totaling 427,458 square feet with a blend of surface and semi-subterranean parking to serve both residential and commercial uses. Amenities including a community plaza, recreational building, pool, barbecue area, upper-level roof decks and landscaped open space are additionally proposed.

The mixed-use development is located at 1250 West Hillcrest Drive situated on a 8.28 acre parcel adjoining sensitive land uses such as single/multi-family residential occupancies immediately east of the Project site. An industrial biotech complex (Amgen) is located to the north, the U.S. Route 101 freeway to the south and commercial uses to the west.

It is anticipated that the Project will begin and complete construction within the fourth quarter of 2023 and 2026, respectively. Figure 1 presents an aerial photograph of the Project location and adjoining community.

Figure 1
Site Location /Vicinity Aerial Photograph



Source Characterization

For on-site construction, emission estimates were based upon the Ventura County profile generated by the California Emissions Estimator Model (CalEEMod) prepared by Envicom Corporation. CalEEMod is an emissions model which provides a uniform platform quantifying pollutant emissions associated with project construction and operation. The model is considered a comprehensive tool for quantifying air quality impacts from projects located throughout the State prepared under the auspices of the California Environmental Quality Act (CEQA).

In 1998, diesel exhaust emissions in the PM_{10} particle size range were identified by the State of California as a toxic air contaminant. As such, the off-road PM_{10} exhaust estimates reported by CalEEMod, which assumed diesel-powered construction equipment will meet EPA-certified Tier 4 Final emission standards, were used to assess DPM exposures. The emission rates for both winter and summer scenarios were found to be commensurate.

To assess localized impacts, construction phase, calendar year and number of days associated with each activity were identified to produce an average daily emission rate. Construction

operations are reported to occur for 795 days over a 1118 day period (3.06 years) based upon a 5 day per week operational schedule which accounts for a portion of concurrent phase activities during building construction, architectural coating and paving operations.

Table 1 provides a summary of estimated average daily particulate emissions associated with each identified construction phase and year. Attachment B presents the emission calculation worksheet used to quantify pollutant source strength. Excerpts from the CalEEMod output file which identify construction phase timelines and associated emission rates are provided in Attachment C.

Table 1
Average Daily Emissions/PM_{10}

Construction Phase/Year	Emissions (Lbs/Day)
Demolition/2023	0.0341
Grading/2024	0.0325
Building Construction/2024	0.0500
Building Construction/2025	0.0500
Building Construction/2026	0.0500
Building Construction/Architectural Coating/2026	0.0540
Building Construction/Architectural Coating/Paving/2026	0.0914
Architectural Coating/2026	0.0040
Average Daily Emissions	**0.0470**

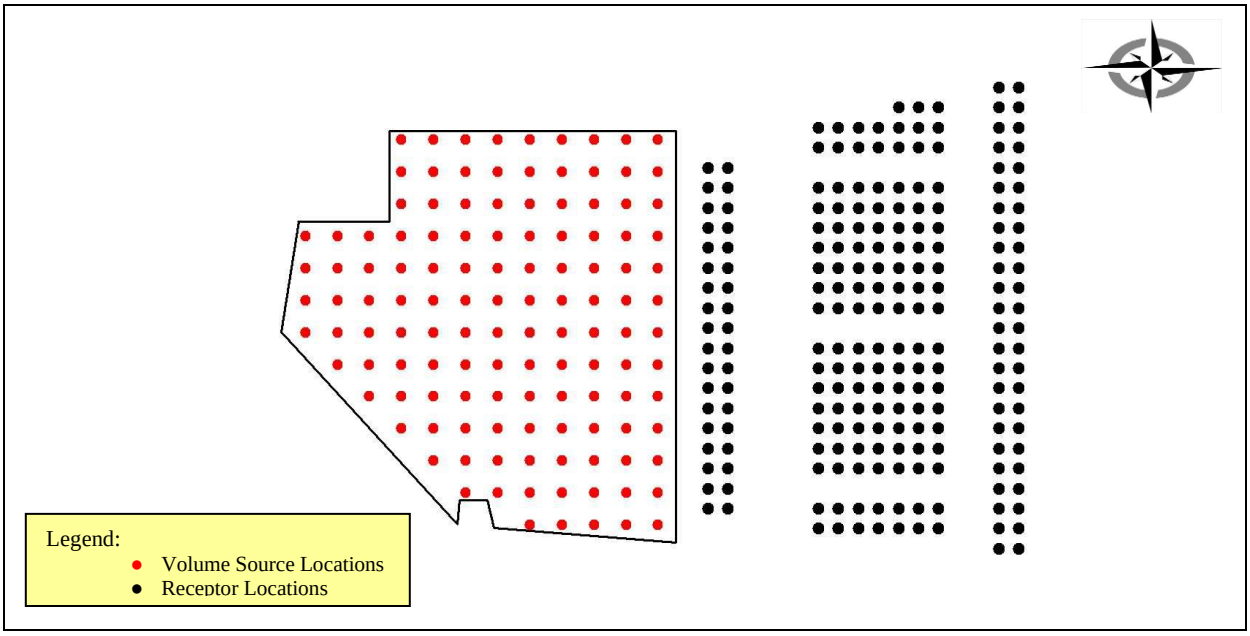
Exposure Quantification

In order to assess the impact of DPM emissions, air quality modeling utilizing the American Meteorological Society (AMS)/EPA Regulatory Model (AERMOD) was performed. AERMOD is a steady-state Gaussian plume model applicable to directly emitted air pollutants that employs best state-of-practice parameterizations for characterizing meteorological influences and atmospheric dispersion. AERMOD is the U.S. Environmental Protection Agency's guideline model for the assessment of near-field pollutant dispersion.

Source treatment outlined in the South Coast Air Quality Management District's Localized Significance Threshold (LST) methodology was utilized whereby exhaust emissions from construction equipment were treated as a set of side-by-side elevated volume sources with a release height of five meters and an initial vertical (sigma z) dimension of 1.4 meters. The elevated source characterization accounts for a mid-range plume rise height associated with exhaust stack emissions for typical off-road equipment inventories. Horizontal (sigma y) parameters were produced by dividing source separation distances by a standard deviation of 2.15.

To accommodate a Cartesian grid format, direction dependent calculations were obtained by identifying the universal transverse mercator (UTM) coordinates for each volume source location. UTM coordinates were also identified for residential receptors located immediately east of the Project site. Flagpole heights were not assigned. Terrain height adjustments were incorporated into the modeling exercise to account for the discrepancy in source-receptor elevations. A graphical representation of the source-receptor grid network is presented in Figure 2.

Figure 2
Source-Receptor Grid Network



Refined air dispersion models require meteorological information to account for local atmospheric conditions. Due to their sensitivity to individual meteorological parameters such as wind speed and direction, the U.S. Environmental Protection Agency recommends that meteorological data used as input into dispersion models be selected on the basis of relative spatial and temporal conditions that exist in the area of concern. In response to this recommendation, meteorological data from the VCAPCD Thousand Oaks monitoring station which is located 3.4 miles northeast of the project site was used to represent local weather conditions and prevailing winds. For the assessment of DPM exposures, maximum concentrations were produced by incorporating all three years (i.e., 2015 through 2017) of available data.

A model scalar value of 1 was assigned to account for emissions generated during construction related activity corresponding to 8 hours per day as reported in the CalEEMod construction profile from 8 a.m. to 4 p.m. (ending hours 9 to 16). A scalar value of 0 was used for non-operational hours. A copy of the AERMOD dispersion model output file is provided in Attachment D.

Risk Characterization

Carcinogenic compounds are not considered to have threshold levels (i.e., dose levels below which there are no risks). Any exposure, therefore, will have some associated risk. As a result, the State of California has established a threshold of one in one hundred thousand (1.0E-05) as a level posing no significant risk for exposures to carcinogens regulated under the Safe Drinking Water and Toxic Enforcement Act (Proposition 65). This threshold is also consistent with the maximum incremental cancer risk established by the VCAPCD for projects prepared under the auspices of CEQA.

Health risks associated with exposure to carcinogenic compounds can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. Under a deterministic approach (i.e., point estimate methodology), the cancer risk probability is determined by multiplying the chemical's annual concentration by its unit risk factor (URF). The URF is a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It represents an upper-bound estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter ($\mu g/m^3$) over a 70 year lifetime. The URF and corresponding cancer potency factor for DPM utilized in the assessment was obtained from the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values*.

To effectively quantify dose, the Office of Environmental Health Hazard Assessment (OEHHA) recommends the incorporation of several discrete exposure variates. To account for upper-bound exposures, lifetime risk values were adjusted to account for an exposure frequency of 260 days per year for a period of 3.06 years (i.e., 0.25 years for the third trimester, 2.0 years for ages 0 to 2 and 0.81 years for the 2 to 9 year age group). Point estimates for daily breathing rates representing the 95th percentile of 361, 1090 and 861 L/kg-day for the identified age groups were utilized and incorporated into the following dose algorithm.

$$Dose_{air} = C_{air} \times \{BR/BW\} \times A \times EF \times 10^{-6}$$

Where:

$Dose_{air}$	=	*dose through inhalation (mg/kg/day)*
C_{air}	=	*concentration of contaminant in air ($\mu g/m^3$)*
$\{BR/BW\}$	=	*daily breathing rate normalized to body weight (L/kg body weight/day)*
A	=	*inhalation absorption factor (unitless)*
EF	=	*exposure frequency (days/365 days)*
10^{-6}	=	*micrograms to milligrams conversion*

The inhalation dose estimates, corresponding age sensitivity factors (i.e., 10 for the third trimester and ages 0 to 2 years and 3 for ages 2 to 16 years) and residential fractional adjustments (i.e., 0.85 for the third trimester and ages 0 to 2 years and 0.72 for ages 2 to 16 years) were incorporated into the following equation to produce carcinogenic risk estimates for ages commensurate with the reported exposure durations.

$$Risk_{inh} = Dose_{air} \times CPF \times ASF \times ED/AT \times FAH$$

Where:

$Risk_{inh}$	=	*inhalation cancer risk*
$Dose_{air}$	=	*daily inhalation dose (mg/kg/day)*
CPF	=	*inhalation cancer potency factor (mg/kg/day^{-1})*
ASF	=	*age sensitivity factor for the specified age group (unitless)*
ED	=	*exposure duration for specified age group (years)*
AT	=	*averaging time (years)*
FAH	=	*fraction of time at home (unitless)*

Table 2 presents the carcinogenic risk estimates for the maximum exposed residential receptor. Attachment A, Tables A1 through A3, column b identify the predicted DPM concentrations, columns f-h, present the URF, corresponding cancer potency factor and dose estimates for the exposure scenarios considered in the assessment. The cancer risk estimate is presented in column i.

Table 2
Carcinogenic Risk / Maximum Exposed Residential Receptor

Age Group	Risk
Third Trimester	1.2E-07
0 to 2 years	2.9E-06
2 to 9 years	2.3E-07
Total	**3.2E-06**

Note: 3.2E-06 denotes cases of cancer of 0.32 in one hundred thousand (100,000) individuals exposed. The individual risk values by age group are rounded values. The total risk value represents the actual summation of risk for the identified occupancy.

As noted above, the cancer risk for the maximum exposed residential receptor is predicted to be below the significance threshold of one in one hundred thousand (1.0E-05).

An evaluation of the potential noncancer effects of DPM exposure was also conducted. Under the point estimate approach, adverse health effects are evaluated by comparing the pollutant concentration with the appropriate Reference Exposure Level (REL). The chronic REL presented in the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values* was considered in the assessment. There are no available acute/8-hour reference exposure levels for DPM.

To quantify noncarcinogenic impacts, the hazard index approach was used. The hazard index assumes that subthreshold exposures adversely affect a specific organ or organ system (i.e., toxicological endpoint). To calculate the hazard index, the pollutant concentration or dose is divided by its toxicity value. Should the total equal or exceed one (i.e., unity), a health hazard is presumed to exist. No exposure frequency or duration adjustments are considered for noncarcinogenic exposures.

Table 3 presents the hazard index value for the maximum exposed residential receptor. Attachment A, Tables A1 through A3, column j present the REL used in the evaluation of chronic noncarcinogenic exposures. The noncancer hazard index generated from off-road equipment activity is presented in column l.

Table 3
Noncarcinogenic Hazard / Maximum Exposed Residential Receptor

Receptor	Hazard
Residential	2.9E-03

Note: 2.9E-03 is commensurate with a numeric value of 0.0029.

As noted above, the hazard index for the respiratory endpoint totaled less than one for the maximum exposed residential receptor.

Conclusion

The carcinogenic risk for the maximum exposed residential receptor was predicted to be below the significance threshold of one in one hundred thousand (1.0E-05). The noncarcinogenic hazard index for the respiratory endpoint was predicted to be less than one. Based upon the carcinogenic risk and noncarcinogenic hazard estimates, the HRA demonstrates that DPM emissions associated with construction of the Project will result in less than significant impacts.

I can be reached at (818) 703-3294 should you have any questions or require additional information.

Sincerely,

Bill Piazza

Attachment A: Carcinogenic Risk/Noncarcinogenic Hazard Calculation Worksheet
Attachment B: Emission Calculation Worksheet
Attachment C: CalEEMod Output File
Attachment D: AERMOD Dispersion Model Output File
Attachment E: List of References

ATTACHMENT A

Carcinogenic Risk/Noncarcinogenic Hazard Calculation Worksheet

Table A1
Quantification of Carcinogenic Risks and Noncarcinogenic Hazard
Third Trimester Exposure Scenario / Maximum Exposed Residential Receptor

Source	Mass GLC		Weight Fraction	Contaminant	Carcinogenic Risk				Noncarcinogenic Hazard		
					URF	CPF	DOSE	RISK	REL	RfD	RESP
	(ug/m^3)	(mg/m^3)			$(ug/m^3)^{-1}$	$(mg/kg/day)^{-1}$	(mg/kg-day)		(ug/m^3)	(mg/kg/day)	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
On-Site Exhaust	0.01452	1.45E-05	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	3.7E-06	1.2E-07	5.0E+00	1.4E-03	2.9E-03
TOTAL								1.2E-07			2.9E-03

Note:

Exposure factors used to calculate contaminant intake

exposure frequency (days/year)	260
exposure duration (years)	0.25
inhalation rate (L/kg-day))	361
inhalation absorption factor	1
averaging time (years)	70
fraction of time at home	0.85
age sensitivity factor	10

Table A2
Quantification of Carcinogenic Risks and Noncarcinogenic Hazard
0 to 2 Year Exposure Scenario / Maximum Exposed Residential Receptor

Source	Mass GLC		Weight Fraction	Contaminant	Carcinogenic Risk				Noncarcinogenic Hazard		
					URF	CPF	DOSE	RISK	REL	RfD	RESP
	(ug/m^3)	(mg/m^3)			$(ug/m^3)^{-1}$	$(mg/kg/day)^{-1}$	(mg/kg-day)		(ug/m^3)	(mg/kg/day)	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
On-Site Exhaust	0.01452	1.45E-05	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	1.1E-05	2.9E-06	5.0E+00	1.4E-03	2.9E-03
TOTAL								2.9E-06			2.9E-03

Note:

Exposure factors used to calculate contaminant intake

exposure frequency (days/year)	260
exposure duration (years)	2
inhalation rate (L/kg-day))	1090
inhalation absorption factor	1
averaging time (years)	70
fraction of time at home	0.85
age sensitivity factor	10

Table A3
Quantification of Carcinogenic Risks and Noncarcinogenic Hazard
2 to 9 Year Exposure Scenario / Maximum Exposed Residential Receptor

Source	Mass GLC		Weight Fraction	Contaminant	Carcinogenic Risk				Noncarcinogenic Hazard		
					URF	CPF	DOSE	RISK	REL	RfD	RESP
	(ug/m^3)	(mg/m^3)			$(ug/m^3)^{-1}$	$(mg/kg/day)^{-1}$	(mg/kg-day)		(ug/m^3)	(mg/kg/day)	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
On-Site Exhaust	0.01452	1.45E-05	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	8.9E-06	2.3E-07	5.0E+00	1.4E-03	2.9E-03
TOTAL								2.3E-07			2.9E-03

Note:

Exposure factors used to calculate contaminant intake

exposure frequency (days/year)	260
exposure duration (years)	0.81
inhalation rate (L/kg-day))	861
inhalation absorption factor	1
averaging time (years)	70
fraction of time at home	0.72
age sensitivity factor	3

ATTACHMENT B

Emission Calculation Worksheet

Emission Calculation Worksheet

Emissions	Phase	Start/End Dates	Lb/Day	# Days	Emissions
On-Site	Demolition	11/27/23 to 12/22/23	0.0341	20	0.6820
Exhaust PM10	Grading	01/01/24 to 03/29/24	0.0325	65	2.1125
	Building Construction	04/01/24 to 12/31/24	0.0500	197	9.8500
	Building Construction	01/01/25 to 12/31/25	0.0500	261	13.0500
	Building Construction	01/01/26 to 05/29/26	0.0500	107	5.3500
	Building Construction/Architectural Coating	06/01/26 to 09/18/26	0.0540	80	4.3200
	Building Construction/Architectural Coating/Paving	09/21/26 to 10/16/26	0.0914	20	1.8280
	Architectural Coating	10/19/26 to 12/18/26	0.0040	45	0.1782
				795	37.3707
	Average Daily Construction (Lb/Day)				0.0470

Exhaust PM10			Combustion mass	Combustion g/s/source
	Combustion Sources	125	0.0470	5.9228E-06

ATTACHMENT C

CalEEMod Output File

Latigo Hillcrest Mixed Use Project - Ventura County, Winter

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

Latigo Hillcrest Mixed Use Project

Ventura County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	462.00	Space	0.00	195,874.00	0
Parking Lot	119.00	Space	0.00	47,600.00	0
Apartments Mid Rise	333.00	Dwelling Unit	8.28	428,763.00	1019
Strip Mall	5.30	1000sqft	0.00	5,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2026
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 - 8.28 ac lot. 333-unit apt: 428,763 gross sf res. 5.3k commercial. 462 space garage 195,874 sf. 119 space parking lot.

Construction Phase - Contractor info. 20 demo, no prep, 65 grad, 665 bldg, pav 20, 145 coat. overlap pav and coat with bldg.

Off-road Equipment -

Off-road Equipment - 2 crane, 4 forklift, 2 generator, 2 welders

Off-road Equipment - 1 concrete saw, 1 excavator, 1 dozer, 1 skid steer

Off-road Equipment - 1 excavator, 1 dozer, 1 loader, 1 backhoe

Off-road Equipment -

Off-road Equipment - No site prep phase

Latigo Hillcrest Mixed Use Project - Ventura County, Winter

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

Trips and VMT - 18 cy belly dump trucks = 1,869 trips for demo debris (8,140 tons = 33,636cy), 2,672 trips for export (48,100cy)

Demolition - 8,140 tons building and pavement debris

Grading - 35ac grading, combo of default 20 grading and 15 site prep. 48,100cy export

Architectural Coating - 50 g/L VOC VCAPCD rule 74.2

Vehicle Trips - Traffic study ADT- Housing 1,473 ADT (/333 = 4.42), Comm 315 ADT (/5.3 = 59.43)

Area Coating - rule 74.2

Water And Wastewater - Hill Canyon treatment plant

Construction Off-road Equipment Mitigation - Tier 4 Final

Area Mitigation - Rule 74.2

Woodstoves - no hearths

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	75.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Residential_Exterior	100	50
tblAreaCoating	Area_EF_Residential_Interior	75	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	20.00	65.00
tblConstructionPhase	NumDays	230.00	665.00
tblConstructionPhase	NumDays	20.00	145.00
tblConstructionPhase	PhaseEndDate	1/5/2024	12/22/2023
tblConstructionPhase	PhaseEndDate	2/2/2024	3/29/2024
tblConstructionPhase	PhaseEndDate	12/20/2024	10/16/2026
tblConstructionPhase	PhaseEndDate	2/14/2025	12/18/2026
tblConstructionPhase	PhaseEndDate	1/17/2025	10/16/2026
tblConstructionPhase	PhaseStartDate	1/6/2024	1/1/2024
tblConstructionPhase	PhaseStartDate	2/3/2024	4/1/2024
tblConstructionPhase	PhaseStartDate	1/18/2025	6/1/2026

Latigo Hillcrest Mixed Use Project - Ventura County, Winter

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

tblConstructionPhase	PhaseStartDate	12/21/2024	9/21/2026
tblGrading	AcresOfGrading	32.50	35.00
tblGrading	MaterialExported	0.00	48,100.00
tblLandUse	LandUseSquareFeet	184,800.00	195,874.00
tblLandUse	LandUseSquareFeet	333,000.00	428,763.00
tblLandUse	LotAcreage	4.16	0.00
tblLandUse	LotAcreage	1.07	0.00
tblLandUse	LotAcreage	8.76	8.28
tblLandUse	LotAcreage	0.12	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblTripsAndVMT	HaulingTripNumber	805.00	1,869.00
tblTripsAndVMT	HaulingTripNumber	6,013.00	2,672.00
tblVehicleTrips	ST_TR	4.91	4.42
tblVehicleTrips	ST_TR	42.04	59.43
tblVehicleTrips	SU_TR	4.09	4.42

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

tblVehicleTrips	SU_TR	20.43	59.43
tblVehicleTrips	WD_TR	5.44	4.42
tblVehicleTrips	WD_TR	44.32	59.43
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

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	1.4797	23.8312	14.8876	0.0754	10.5317	0.6373	11.1690	1.8041	0.5997	2.4037	0.0000	8,041.5548	8,041.5548	0.9228	0.9346	8,343.1347
2024	3.0693	21.1519	27.4314	0.0707	7.4970	0.8075	8.0571	3.6060	0.7688	4.1227	0.0000	6,997.7137	6,997.7137	0.8065	0.4057	7,103.2483
2025	2.8735	19.8312	26.7764	0.0697	3.3402	0.7146	4.0548	0.8976	0.6799	1.5775	0.0000	6,892.7213	6,892.7213	0.7248	0.2839	6,995.4354
2026	23.2572	29.5980	44.4417	0.0996	4.0303	1.1871	5.2174	1.0806	1.1187	2.1993	0.0000	9,800.8614	9,800.8614	1.4646	0.2906	9,924.0597
Maximum	**23.2572**	**29.5980**	**44.4417**	**0.0996**	**10.5317**	**1.1871**	**11.1690**	**3.6060**	**1.1187**	**4.1227**	**0.0000**	**9,800.8614**	**9,800.8614**	**1.4646**	**0.9346**	**9,924.0597**

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

2.1 Overall Construction (Maximum Daily Emission)

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	0.4892	13.8671	16.6597	0.0754	5.6817	0.1173	5.7991	1.0696	0.1137	1.1833	0.0000	8,041.5548	8,041.5548	0.9228	0.9346	8,343.1347
2024	1.4887	7.0769	29.4148	0.0707	3.8136	0.0818	3.8830	1.7428	0.0799	1.8107	0.0000	6,997.7137	6,997.7137	0.8065	0.4057	7,103.2483
2025	1.4248	6.9803	28.8818	0.0697	3.3402	0.0811	3.4213	0.8976	0.0793	0.9769	0.0000	6,892.7213	6,892.7213	0.7248	0.2839	6,995.4354
2026	21.0326	8.3641	49.2881	0.0996	4.0303	0.1249	4.1552	1.0806	0.1229	1.2035	0.0000	9,800.8614	9,800.8614	1.4646	0.2906	9,924.0597
Maximum	**21.0326**	**13.8671**	**49.2881**	**0.0996**	**5.6817**	**0.1249**	**5.7991**	**1.7428**	**0.1229**	**1.8107**	**0.0000**	**9,800.8614**	**9,800.8614**	**1.4646**	**0.9346**	**9,924.0597**

	ROG	NOx	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	**20.35**	**61.56**	**-9.43**	**0.00**	**33.60**	**87.89**	**39.44**	**35.16**	**87.50**	**49.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.9651	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525	0.0000	49.5962	49.5962	0.0477	0.0000	50.7889
Energy	0.1100	0.9403	0.4013	6.0000e-003		0.0760	0.0760		0.0760	0.0760		1,200.1194	1,200.1194	0.0230	0.0220	1,207.2511
Mobile	4.4719	5.0387	41.5381	0.0809	9.5936	0.0642	9.6577	2.5573	0.0599	2.6171		8,234.9648	8,234.9648	0.6031	0.4095	8,372.0629
Total	**15.5470**	**6.2957**	**69.4460**	**0.0883**	**9.5936**	**0.2927**	**9.8863**	**2.5573**	**0.2884**	**2.8457**	**0.0000**	**9,484.6804**	**9,484.6804**	**0.6738**	**0.4315**	**9,630.1029**

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	10.9651	0.3167	27.5066	1.4600e-003		0.1525	0.1525		0.1525	0.1525	0.0000	49.5962	49.5962	0.0477	0.0000	50.7889
Energy	0.1100	0.9403	0.4013	6.0000e-003		0.0760	0.0760		0.0760	0.0760		1,200.1194	1,200.1194	0.0230	0.0220	1,207.2511
Mobile	4.4719	5.0387	41.5381	0.0809	9.5936	0.0642	9.6577	2.5573	0.0599	2.6171		8,234.9648	8,234.9648	0.6031	0.4095	8,372.0629
Total	**15.5470**	**6.2957**	**69.4460**	**0.0883**	**9.5936**	**0.2927**	**9.8863**	**2.5573**	**0.2884**	**2.8457**	**0.0000**	**9,484.6804**	**9,484.6804**	**0.6738**	**0.4315**	**9,630.1029**

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

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/27/2023	12/22/2023	5	20	
2	Site Preparation	Site Preparation	12/23/2023	12/22/2023	5	0	
3	Grading	Grading	1/1/2024	3/29/2024	5	65	
4	Building Construction	Building Construction	4/1/2024	10/16/2026	5	665	
5	Architectural Coating	Architectural Coating	6/1/2026	12/18/2026	5	145	
6	Paving	Paving	9/21/2026	10/16/2026	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 35

Acres of Paving: 0

Residential Indoor: 868,245; Residential Outdoor: 289,415; Non-Residential Indoor: 7,950; Non-Residential Outdoor: 2,650; Striped Parking Area: 14,608 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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

Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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	4	10.00	0.00	1,869.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,672.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	344.00	76.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	69.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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

Water Exposed Area

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					8.8181	0.0000	8.8181	1.3354	0.0000	1.3354			0.0000			0.0000
Off-Road	1.2719	12.1212	11.4013	0.0220		0.5541	0.5541		0.5201	0.5201		2,119.4455	2,119.4455	0.5230		2,132.5203
Total	**1.2719**	**12.1212**	**11.4013**	**0.0220**	**8.8181**	**0.5541**	**9.3722**	**1.3354**	**0.5201**	**1.8554**		**2,119.4455**	**2,119.4455**	**0.5230**		**2,132.5203**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	0.1768	11.6892	3.2350	0.0527	1.6314	0.0828	1.7142	0.4469	0.0792	0.5261		5,854.3274	5,854.3274	0.3975	0.9325	6,142.1545
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	0.0311	0.0208	0.2514	6.7000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		67.7819	67.7819	2.2900e-003	2.0800e-003	68.4600
Total	**0.2078**	**11.7100**	**3.4864**	**0.0534**	**1.7136**	**0.0832**	**1.7968**	**0.4687**	**0.0796**	**0.5483**		**5,922.1093**	**5,922.1093**	**0.3998**	**0.9346**	**6,210.6145**

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					3.9681	0.0000	3.9681	0.6009	0.0000	0.6009			0.0000			0.0000
Off-Road	0.2814	2.1570	13.1733	0.0220		0.0341	0.0341		0.0341	0.0341	0.0000	2,119.4455	2,119.4455	0.5230		2,132.5203
Total	**0.2814**	**2.1570**	**13.1733**	**0.0220**	**3.9681**	**0.0341**	**4.0023**	**0.6009**	**0.0341**	**0.6351**	**0.0000**	**2,119.4455**	**2,119.4455**	**0.5230**		**2,132.5203**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	0.1768	11.6892	3.2350	0.0527	1.6314	0.0828	1.7142	0.4469	0.0792	0.5261		5,854.3274	5,854.3274	0.3975	0.9325	6,142.1545
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	0.0311	0.0208	0.2514	6.7000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		67.7819	67.7819	2.2900e-003	2.0800e-003	68.4600
Total	**0.2078**	**11.7100**	**3.4864**	**0.0534**	**1.7136**	**0.0832**	**1.7968**	**0.4687**	**0.0796**	**0.5483**		**5,922.1093**	**5,922.1093**	**0.3998**	**0.9346**	**6,210.6145**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6971	0.0000	6.6971	3.3876	0.0000	3.3876			0.0000			0.0000
Off-Road	1.1632	11.4270	10.8673	0.0199		0.5232	0.5232		0.4813	0.4813		1,930.7799	1,930.7799	0.6245		1,946.3912
Total	**1.1632**	**11.4270**	**10.8673**	**0.0199**	**6.6971**	**0.5232**	**7.2203**	**3.3876**	**0.4813**	**3.8690**		**1,930.7799**	**1,930.7799**	**0.6245**		**1,946.3912**

Latigo Hillcrest Mixed Use Project - Ventura County, Winter

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

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0772	5.0966	1.4648	0.0228	0.7177	0.0365	0.7542	0.1966	0.0349	0.2315		2,532.9178	2,532.9178	0.1800	0.4038	2,657.7354
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	0.0291	0.0187	0.2344	6.5000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		65.7045	65.7045	2.0900e-003	1.9400e-003	66.3357
Total	**0.1063**	**5.1153**	**1.6991**	**0.0234**	**0.7999**	**0.0369**	**0.8368**	**0.2184**	**0.0353**	**0.2537**		**2,598.6223**	**2,598.6223**	**0.1821**	**0.4057**	**2,724.0711**

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					3.0137	0.0000	3.0137	1.5244	0.0000	1.5244			0.0000			0.0000
Off-Road	0.2441	1.0575	12.4357	0.0199		0.0325	0.0325		0.0325	0.0325	0.0000	1,930.7799	1,930.7799	0.6245		1,946.3912
Total	**0.2441**	**1.0575**	**12.4357**	**0.0199**	**3.0137**	**0.0325**	**3.0462**	**1.5244**	**0.0325**	**1.5570**	**0.0000**	**1,930.7799**	**1,930.7799**	**0.6245**		**1,946.3912**

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

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0772	5.0966	1.4648	0.0228	0.7177	0.0365	0.7542	0.1966	0.0349	0.2315		2,532.9178	2,532.9178	0.1800	0.4038	2,657.7354
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	0.0291	0.0187	0.2344	6.5000e-004	0.0822	4.2000e-004	0.0826	0.0218	3.9000e-004	0.0222		65.7045	65.7045	2.0900e-003	1.9400e-003	66.3357
Total	**0.1063**	**5.1153**	**1.6991**	**0.0234**	**0.7999**	**0.0369**	**0.8368**	**0.2184**	**0.0353**	**0.2537**		**2,598.6223**	**2,598.6223**	**0.1821**	**0.4057**	**2,724.0711**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9991	17.5172	18.3181	0.0345		0.7756	0.7756		0.7389	0.7389		3,231.0608	3,231.0608	0.6006		3,246.0748
Total	**1.9991**	**17.5172**	**18.3181**	**0.0345**		**0.7756**	**0.7756**		**0.7389**	**0.7389**		**3,231.0608**	**3,231.0608**	**0.6006**		**3,246.0748**

Latigo Hillcrest Mixed Use Project - Ventura County, Winter

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

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0707	2.9926	1.0502	0.0139	0.5143	0.0173	0.5316	0.1480	0.0165	0.1645		1,506.4179	1,506.4179	0.0642	0.2255	1,575.2252
Worker	0.9995	0.6421	8.0631	0.0224	2.8259	0.0146	2.8405	0.7496	0.0134	0.7630		2,260.2350	2,260.2350	0.0719	0.0668	2,281.9483
Total	**1.0701**	**3.6348**	**9.1133**	**0.0362**	**3.3402**	**0.0318**	**3.3720**	**0.8976**	**0.0299**	**0.9275**		**3,766.6529**	**3,766.6529**	**0.1361**	**0.2923**	**3,857.1735**

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	0.4186	3.4421	20.3015	0.0345		0.0500	0.0500		0.0500	0.0500	0.0000	3,231.0608	3,231.0608	0.6006		3,246.0748
Total	**0.4186**	**3.4421**	**20.3015**	**0.0345**		**0.0500**	**0.0500**		**0.0500**	**0.0500**	**0.0000**	**3,231.0608**	**3,231.0608**	**0.6006**		**3,246.0748**

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

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0707	2.9926	1.0502	0.0139	0.5143	0.0173	0.5316	0.1480	0.0165	0.1645		1,506.4179	1,506.4179	0.0642	0.2255	1,575.2252
Worker	0.9995	0.6421	8.0631	0.0224	2.8259	0.0146	2.8405	0.7496	0.0134	0.7630		2,260.2350	2,260.2350	0.0719	0.0668	2,281.9483
Total	**1.0701**	**3.6348**	**9.1133**	**0.0362**	**3.3402**	**0.0318**	**3.3720**	**0.8976**	**0.0299**	**0.9275**		**3,766.6529**	**3,766.6529**	**0.1361**	**0.2923**	**3,857.1735**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8673	16.2931	18.1961	0.0345		0.6835	0.6835		0.6506	0.6506		3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**1.8673**	**16.2931**	**18.1961**	**0.0345**		**0.6835**	**0.6835**		**0.6506**	**0.6506**		**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

Latigo Hillcrest Mixed Use Project - Ventura County, Winter

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

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0689	2.9591	1.0460	0.0136	0.5143	0.0173	0.5316	0.1480	0.0165	0.1646		1,478.9618	1,478.9618	0.0660	0.2213	1,546.5617
Worker	0.9373	0.5791	7.5343	0.0216	2.8259	0.0139	2.8398	0.7496	0.0128	0.7623		2,182.6657	2,182.6657	0.0655	0.0626	2,202.9483
Total	**1.0062**	**3.5382**	**8.5803**	**0.0352**	**3.3402**	**0.0311**	**3.3714**	**0.8976**	**0.0293**	**0.9269**		**3,661.6275**	**3,661.6275**	**0.1315**	**0.2839**	**3,749.5099**

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	0.4186	3.4421	20.3015	0.0345		0.0500	0.0500		0.0500	0.0500	0.0000	3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**0.4186**	**3.4421**	**20.3015**	**0.0345**		**0.0500**	**0.0500**		**0.0500**	**0.0500**	**0.0000**	**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

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

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0689	2.9591	1.0460	0.0136	0.5143	0.0173	0.5316	0.1480	0.0165	0.1646		1,478.9618	1,478.9618	0.0660	0.2213	1,546.5617
Worker	0.9373	0.5791	7.5343	0.0216	2.8259	0.0139	2.8398	0.7496	0.0128	0.7623		2,182.6657	2,182.6657	0.0655	0.0626	2,202.9483
Total	**1.0062**	**3.5382**	**8.5803**	**0.0352**	**3.3402**	**0.0311**	**3.3714**	**0.8976**	**0.0293**	**0.9269**		**3,661.6275**	**3,661.6275**	**0.1315**	**0.2839**	**3,749.5099**

3.5 Building Construction - 2026

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	1.8673	16.2931	18.1961	0.0345		0.6835	0.6835		0.6506	0.6506		3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**1.8673**	**16.2931**	**18.1961**	**0.0345**		**0.6835**	**0.6835**		**0.6506**	**0.6506**		**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

Latigo Hillcrest Mixed Use Project - Ventura County, Winter

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

3.5 Building Construction - 2026

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	0.0673	2.9226	1.0443	0.0133	0.5144	0.0172	0.5315	0.1481	0.0164	0.1645		1,451.5821	1,451.5821	0.0678	0.2171	1,517.9795
Worker	0.8821	0.5266	7.0844	0.0209	2.8259	0.0132	2.8391	0.7496	0.0121	0.7617		2,113.8256	2,113.8256	0.0599	0.0590	2,132.9085
Total	**0.9494**	**3.4492**	**8.1286**	**0.0342**	**3.3402**	**0.0304**	**3.3706**	**0.8976**	**0.0286**	**0.9262**		**3,565.4077**	**3,565.4077**	**0.1277**	**0.2761**	**3,650.8880**

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	0.4186	3.4421	20.3015	0.0345		0.0500	0.0500		0.0500	0.0500	0.0000	3,231.0938	3,231.0938	0.5933		3,245.9255
Total	**0.4186**	**3.4421**	**20.3015**	**0.0345**		**0.0500**	**0.0500**		**0.0500**	**0.0500**	**0.0000**	**3,231.0938**	**3,231.0938**	**0.5933**		**3,245.9255**

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

3.5 Building Construction - 2026

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	0.0673	2.9226	1.0443	0.0133	0.5144	0.0172	0.5315	0.1481	0.0164	0.1645		1,451.5821	1,451.5821	0.0678	0.2171	1,517.9795
Worker	0.8821	0.5266	7.0844	0.0209	2.8259	0.0132	2.8391	0.7496	0.0121	0.7617		2,113.8256	2,113.8256	0.0599	0.0590	2,132.9085
Total	**0.9494**	**3.4492**	**8.1286**	**0.0342**	**3.3402**	**0.0304**	**3.3706**	**0.8976**	**0.0286**	**0.9262**		**3,565.4077**	**3,565.4077**	**0.1277**	**0.2761**	**3,650.8880**

3.6 Architectural Coating - 2026

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	19.1390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**19.3098**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Latigo Hillcrest Mixed Use Project - Ventura County, Winter

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

3.6 Architectural Coating - 2026

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	0.1769	0.1056	1.4210	4.1900e-003	0.5668	2.6400e-003	0.5695	0.1504	2.4300e-003	0.1528		423.9941	423.9941	0.0120	0.0118	427.8218
Total	**0.1769**	**0.1056**	**1.4210**	**4.1900e-003**	**0.5668**	**2.6400e-003**	**0.5695**	**0.1504**	**2.4300e-003**	**0.1528**		**423.9941**	**423.9941**	**0.0120**	**0.0118**	**427.8218**

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	19.1390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**19.1687**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

3.6 Architectural Coating - 2026

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	0.1769	0.1056	1.4210	4.1900e-003	0.5668	2.6400e-003	0.5695	0.1504	2.4300e-003	0.1528		423.9941	423.9941	0.0120	0.0118	427.8218
Total	**0.1769**	**0.1056**	**1.4210**	**4.1900e-003**	**0.5668**	**2.6400e-003**	**0.5695**	**0.1504**	**2.4300e-003**	**0.1528**		**423.9941**	**423.9941**	**0.0120**	**0.0118**	**427.8218**

3.7 Paving - 2026

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	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Latigo Hillcrest Mixed Use Project - Ventura County, Winter

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

3.7 Paving - 2026

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	0.0385	0.0230	0.3089	9.1000e-004	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		92.1726	92.1726	2.6100e-003	2.5700e-003	93.0047
Total	**0.0385**	**0.0230**	**0.3089**	**9.1000e-004**	**0.1232**	**5.7000e-004**	**0.1238**	**0.0327**	**5.3000e-004**	**0.0332**		**92.1726**	**92.1726**	**2.6100e-003**	**2.5700e-003**	**93.0047**

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	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2805**	**1.2154**	**17.2957**	**0.0228**		**0.0374**	**0.0374**		**0.0374**	**0.0374**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

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

3.7 Paving - 2026

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	0.0385	0.0230	0.3089	9.1000e-004	0.1232	5.7000e-004	0.1238	0.0327	5.3000e-004	0.0332		92.1726	92.1726	2.6100e-003	2.5700e-003	93.0047
Total	**0.0385**	**0.0230**	**0.3089**	**9.1000e-004**	**0.1232**	**5.7000e-004**	**0.1238**	**0.0327**	**5.3000e-004**	**0.0332**		**92.1726**	**92.1726**	**2.6100e-003**	**2.5700e-003**	**93.0047**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

ATTACHMENT D

AERMOD Dispersion Model Output File

```
**BEE-Line Software:  (Version 12.09) data input file
**  Model: AERMOD.EXE     Input File Creation Date: 3/30/2023  Time: 4:02:58 PM
NO ECHO


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***



    ********   WARNING MESSAGES   ********
 ME W186     621       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
 MX W403     621       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA Data

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION 22112  ***   *** Latigo Hillcrest Mixed Use Project                                ***        03/30/23
 *** AERMET - VERSION  18081 ***   *** Particulates (DPM) / Construction                                 ***        16:03:02
                                                                                                                    PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  URBAN  SigA Data

                                             ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for   125 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =    839784.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Assumes No FLAGPOLE Receptor Heights.
      * The User Specified a Pollutant Type of: OTHER

 **Model Calculates ANNUAL Averages Only

 **This Run Includes:    125 Source(s);       1 Source Group(s); and     213 Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:    125 VOLUME source(s)
                 and:      0 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  18081
```

**Output Options Selected:
Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 247.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Input Runstream File: E:\WD Passport\2150 hillcrest drive\model\CONSTRUCTION_REV_2015-2017_OTHER.DTA
**Output Print File: E:\WD Passport\2150 hillcrest drive\model\CONSTRUCTION_REV_2015-2017_OTHER.LST

**File for Summary of Results: E:\WD Passport\2150 hillcrest drive\model\CONSTRUCTION_REV_2015-2017_OTHER.SUM

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
C_1	0	0.59228E-05	322716.0	3784354.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_2	0	0.59228E-05	322732.0	3784354.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_3	0	0.59228E-05	322748.0	3784354.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_4	0	0.59228E-05	322764.0	3784354.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_5	0	0.59228E-05	322780.0	3784354.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_6	0	0.59228E-05	322684.0	3784370.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_7	0	0.59228E-05	322700.0	3784370.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_8	0	0.59228E-05	322716.0	3784370.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_9	0	0.59228E-05	322732.0	3784370.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_10	0	0.59228E-05	322748.0	3784370.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_11	0	0.59228E-05	322764.0	3784370.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_12	0	0.59228E-05	322780.0	3784370.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_13	0	0.59228E-05	322668.0	3784386.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_14	0	0.59228E-05	322684.0	3784386.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_15	0	0.59228E-05	322700.0	3784386.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_16	0	0.59228E-05	322716.0	3784386.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_17	0	0.59228E-05	322732.0	3784386.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_18	0	0.59228E-05	322748.0	3784386.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_19	0	0.59228E-05	322764.0	3784386.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_20	0	0.59228E-05	322780.0	3784386.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_21	0	0.59228E-05	322652.0	3784402.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_22	0	0.59228E-05	322668.0	3784402.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_23	0	0.59228E-05	322684.0	3784402.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_24	0	0.59228E-05	322700.0	3784402.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_25	0	0.59228E-05	322716.0	3784402.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_26	0	0.59228E-05	322732.0	3784402.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_27	0	0.59228E-05	322748.0	3784402.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_28	0	0.59228E-05	322764.0	3784402.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_29	0	0.59228E-05	322780.0	3784402.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_30	0	0.59228E-05	322636.0	3784418.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_31	0	0.59228E-05	322652.0	3784418.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_32	0	0.59228E-05	322668.0	3784418.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_33	0	0.59228E-05	322684.0	3784418.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_34	0	0.59228E-05	322700.0	3784418.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_35	0	0.59228E-05	322716.0	3784418.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_36	0	0.59228E-05	322732.0	3784418.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_37	0	0.59228E-05	322748.0	3784418.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_38	0	0.59228E-05	322764.0	3784418.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_39	0	0.59228E-05	322780.0	3784418.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_40	0	0.59228E-05	322620.0	3784434.0	198.0	5.00	7.44	1.40	YES	HROFDY

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
C_41	0	0.59228E-05	322636.0	3784434.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_42	0	0.59228E-05	322652.0	3784434.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_43	0	0.59228E-05	322668.0	3784434.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_44	0	0.59228E-05	322684.0	3784434.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_45	0	0.59228E-05	322700.0	3784434.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_46	0	0.59228E-05	322716.0	3784434.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_47	0	0.59228E-05	322732.0	3784434.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_48	0	0.59228E-05	322748.0	3784434.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_49	0	0.59228E-05	322764.0	3784434.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_50	0	0.59228E-05	322780.0	3784434.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_51	0	0.59228E-05	322604.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_52	0	0.59228E-05	322620.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_53	0	0.59228E-05	322636.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_54	0	0.59228E-05	322652.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_55	0	0.59228E-05	322668.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_56	0	0.59228E-05	322684.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_57	0	0.59228E-05	322700.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_58	0	0.59228E-05	322716.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_59	0	0.59228E-05	322732.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_60	0	0.59228E-05	322748.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_61	0	0.59228E-05	322764.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_62	0	0.59228E-05	322780.0	3784450.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_63	0	0.59228E-05	322604.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_64	0	0.59228E-05	322620.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_65	0	0.59228E-05	322636.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_66	0	0.59228E-05	322652.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_67	0	0.59228E-05	322668.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_68	0	0.59228E-05	322684.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_69	0	0.59228E-05	322700.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_70	0	0.59228E-05	322716.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_71	0	0.59228E-05	322732.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_72	0	0.59228E-05	322748.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_73	0	0.59228E-05	322764.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_74	0	0.59228E-05	322780.0	3784466.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_75	0	0.59228E-05	322604.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_76	0	0.59228E-05	322620.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_77	0	0.59228E-05	322636.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_78	0	0.59228E-05	322652.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_79	0	0.59228E-05	322668.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_80	0	0.59228E-05	322684.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
C_81	0	0.59228E-05	322700.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_82	0	0.59228E-05	322716.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_83	0	0.59228E-05	322732.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_84	0	0.59228E-05	322748.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_85	0	0.59228E-05	322764.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_86	0	0.59228E-05	322780.0	3784482.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_87	0	0.59228E-05	322604.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY

C_88	0	0.59228E-05	322620.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_89	0	0.59228E-05	322636.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_90	0	0.59228E-05	322652.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_91	0	0.59228E-05	322668.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_92	0	0.59228E-05	322684.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_93	0	0.59228E-05	322700.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_94	0	0.59228E-05	322716.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_95	0	0.59228E-05	322732.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_96	0	0.59228E-05	322748.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_97	0	0.59228E-05	322764.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_98	0	0.59228E-05	322780.0	3784498.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_99	0	0.59228E-05	322652.0	3784514.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_100	0	0.59228E-05	322668.0	3784514.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_101	0	0.59228E-05	322684.0	3784514.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_102	0	0.59228E-05	322700.0	3784514.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_103	0	0.59228E-05	322716.0	3784514.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_104	0	0.59228E-05	322732.0	3784514.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_105	0	0.59228E-05	322748.0	3784514.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_106	0	0.59228E-05	322764.0	3784514.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_107	0	0.59228E-05	322780.0	3784514.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_108	0	0.59228E-05	322652.0	3784530.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_109	0	0.59228E-05	322668.0	3784530.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_110	0	0.59228E-05	322684.0	3784530.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_111	0	0.59228E-05	322700.0	3784530.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_112	0	0.59228E-05	322716.0	3784530.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_113	0	0.59228E-05	322732.0	3784530.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_114	0	0.59228E-05	322748.0	3784530.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_115	0	0.59228E-05	322764.0	3784530.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_116	0	0.59228E-05	322780.0	3784530.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_117	0	0.59228E-05	322652.0	3784546.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_118	0	0.59228E-05	322668.0	3784546.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_119	0	0.59228E-05	322684.0	3784546.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_120	0	0.59228E-05	322700.0	3784546.0	198.0	5.00	7.44	1.40	YES	HROFDY

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
C_121	0	0.59228E-05	322716.0	3784546.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_122	0	0.59228E-05	322732.0	3784546.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_123	0	0.59228E-05	322748.0	3784546.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_124	0	0.59228E-05	322764.0	3784546.0	198.0	5.00	7.44	1.40	YES	HROFDY
C_125	0	0.59228E-05	322780.0	3784546.0	198.0	5.00	7.44	1.40	YES	HROFDY

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	C_1 , C_2 , C_3 , C_4 , C_5 , C_6 , C_7 , C_8 ,
	C_9 , C_10 , C_11 , C_12 , C_13 , C_14 , C_15 , C_16 ,
	C_17 , C_18 , C_19 , C_20 , C_21 , C_22 , C_23 , C_24 ,
	C_25 , C_26 , C_27 , C_28 , C_29 , C_30 , C_31 , C_32 ,
	C_33 , C_34 , C_35 , C_36 , C_37 , C_38 , C_39 , C_40 ,

C_41 , C_42 , C_43 , C_44 , C_45 , C_46 , C_47 , C_48 ,
C_49 , C_50 , C_51 , C_52 , C_53 , C_54 , C_55 , C_56 ,

C_57 , C_58 , C_59 , C_60 , C_61 , C_62 , C_63 , C_64 ,

C_65 , C_66 , C_67 , C_68 , C_69 , C_70 , C_71 , C_72 ,

C_73 , C_74 , C_75 , C_76 , C_77 , C_78 , C_79 , C_80 ,

C_81 , C_82 , C_83 , C_84 , C_85 , C_86 , C_87 , C_88 ,

C_89 , C_90 , C_91 , C_92 , C_93 , C_94 , C_95 , C_96 ,

C_97 , C_98 , C_99 , C_100 , C_101 , C_102 , C_103 , C_104 ,

C_105 , C_106 , C_107 , C_108 , C_109 , C_110 , C_111 , C_112 ,

C_113 , C_114 , C_115 , C_116 , C_117 , C_118 , C_119 , C_120 ,

C_121 , C_122 , C_123 , C_124 , C_125 ,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs

839784. C_1 , C_2 , C_3 , C_4 , C_5 , C_6 , C_7 , C_8 ,

C_9 , C_10 , C_11 , C_12 , C_13 , C_14 , C_15 , C_16 ,

C_17 , C_18 , C_19 , C_20 , C_21 , C_22 , C_23 , C_24 ,

C_25 , C_26 , C_27 , C_28 , C_29 , C_30 , C_31 , C_32 ,

C_33 , C_34 , C_35 , C_36 , C_37 , C_38 , C_39 , C_40 ,

C_41 , C_42 , C_43 , C_44 , C_45 , C_46 , C_47 , C_48 ,

C_49 , C_50 , C_51 , C_52 , C_53 , C_54 , C_55 , C_56 ,

C_57 , C_58 , C_59 , C_60 , C_61 , C_62 , C_63 , C_64 ,

C_65 , C_66 , C_67 , C_68 , C_69 , C_70 , C_71 , C_72 ,

C_73 , C_74 , C_75 , C_76 , C_77 , C_78 , C_79 , C_80 ,

C_81 , C_82 , C_83 , C_84 , C_85 , C_86 , C_87 , C_88 ,

C_89 , C_90 , C_91 , C_92 , C_93 , C_94 , C_95 , C_96 ,

C_97 , C_98 , C_99 , C_100 , C_101 , C_102 , C_103 , C_104 ,

C_105 , C_106 , C_107 , C_108 , C_109 , C_110 , C_111 , C_112 ,

C_113 , C_114 , C_115 , C_116 , C_117 , C_118 , C_119 , C_120 ,

C_121 , C_122 , C_123 , C_124 , C_125 ,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_1 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_2 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_3 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_4 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_5 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_6 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_7 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_8 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_9 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_10 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_11 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_12 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_13 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_14 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_15 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_16 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_17 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_18 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_19 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_20 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_21 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_22 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_23 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_24 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_25 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_26 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_27 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_28 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_29 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_30 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_31 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_32 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_33 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_34 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_35 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_36 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_37 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_38 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_39 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_40 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_41 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_42 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_43 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_44 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_45 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_46 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_47 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_48 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_49 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_50 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_51 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_52 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_53 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_54 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_55 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_56 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_57 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_58 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_59 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_60 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_61 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_62 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_63 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_64 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_65 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_66 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_67 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_68 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_69 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_70 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_71 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_72 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_73 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_74 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_75 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_76 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_77 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_78 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_79 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_80 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_81 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_82 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_83 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_84 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_85 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_86 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_87 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_88 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_89 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_90 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_91 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_92 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_93 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_94 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_95 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_96 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_97 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_98 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_99 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_100 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_101 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_102 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_103 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_104 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_105 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

SOURCE ID = C_106 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_107 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_108 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_109 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_110 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_111 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_112 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_113 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_114 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_115 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_116 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_117 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00	7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00	19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_118 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_119 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_120 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_121 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_122 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_123 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_124 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_125 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(322950.0, 3784342.0, 194.7, 870.4, 0.0); (322960.0, 3784342.0, 194.8, 870.4, 0.0);
(322860.0, 3784352.0, 195.5, 870.4, 0.0); (322870.0, 3784352.0, 195.6, 870.4, 0.0);
(322880.0, 3784352.0, 195.6, 870.4, 0.0); (322890.0, 3784352.0, 195.5, 870.4, 0.0);
(322900.0, 3784352.0, 195.5, 870.4, 0.0); (322910.0, 3784352.0, 195.4, 870.4, 0.0);
(322920.0, 3784352.0, 195.3, 870.4, 0.0); (322950.0, 3784352.0, 195.1, 870.4, 0.0);
(322960.0, 3784352.0, 195.1, 870.4, 0.0); (322860.0, 3784362.0, 195.7, 870.4, 0.0);
(322870.0, 3784362.0, 195.8, 870.4, 0.0); (322880.0, 3784362.0, 195.8, 870.4, 0.0);
(322890.0, 3784362.0, 195.7, 870.4, 0.0); (322900.0, 3784362.0, 195.7, 870.4, 0.0);
(322910.0, 3784362.0, 195.5, 870.4, 0.0); (322920.0, 3784362.0, 195.4, 870.4, 0.0);
(322950.0, 3784362.0, 195.2, 870.4, 0.0); (322960.0, 3784362.0, 195.2, 870.4, 0.0);
(322950.0, 3784372.0, 195.3, 870.4, 0.0); (322960.0, 3784372.0, 195.4, 870.4, 0.0);
(322860.0, 3784382.0, 196.0, 870.4, 0.0); (322870.0, 3784382.0, 196.0, 870.4, 0.0);
(322880.0, 3784382.0, 196.0, 870.4, 0.0); (322890.0, 3784382.0, 196.0, 870.4, 0.0);
(322900.0, 3784382.0, 195.9, 870.4, 0.0); (322910.0, 3784382.0, 195.8, 870.4, 0.0);
(322920.0, 3784382.0, 195.7, 870.4, 0.0); (322950.0, 3784382.0, 195.5, 870.4, 0.0);
(322960.0, 3784382.0, 195.5, 870.4, 0.0); (322860.0, 3784392.0, 196.3, 870.4, 0.0);
(322870.0, 3784392.0, 196.4, 870.4, 0.0); (322880.0, 3784392.0, 196.4, 870.4, 0.0);
(322890.0, 3784392.0, 196.3, 870.4, 0.0); (322900.0, 3784392.0, 196.2, 870.4, 0.0);
(322910.0, 3784392.0, 196.1, 870.4, 0.0); (322920.0, 3784392.0, 195.9, 870.4, 0.0);
(322950.0, 3784392.0, 195.7, 870.4, 0.0); (322960.0, 3784392.0, 195.7, 870.4, 0.0);
(322860.0, 3784402.0, 196.7, 870.4, 0.0); (322870.0, 3784402.0, 196.8, 870.4, 0.0);
(322880.0, 3784402.0, 196.8, 870.4, 0.0); (322890.0, 3784402.0, 196.6, 870.4, 0.0);
(322900.0, 3784402.0, 196.5, 870.4, 0.0); (322910.0, 3784402.0, 196.3, 870.4, 0.0);
(322920.0, 3784402.0, 196.2, 870.4, 0.0); (322950.0, 3784402.0, 196.0, 870.4, 0.0);
(322960.0, 3784402.0, 195.9, 870.4, 0.0); (322860.0, 3784412.0, 197.0, 870.4, 0.0);
(322870.0, 3784412.0, 197.2, 870.4, 0.0); (322880.0, 3784412.0, 197.2, 870.4, 0.0);
(322890.0, 3784412.0, 197.0, 870.4, 0.0); (322900.0, 3784412.0, 196.8, 870.4, 0.0);
(322910.0, 3784412.0, 196.6, 870.4, 0.0); (322920.0, 3784412.0, 196.5, 870.4, 0.0);
(322950.0, 3784412.0, 196.2, 870.4, 0.0); (322960.0, 3784412.0, 196.1, 870.4, 0.0);
(322860.0, 3784422.0, 197.3, 870.4, 0.0); (322870.0, 3784422.0, 197.5, 870.4, 0.0);
(322880.0, 3784422.0, 197.5, 870.4, 0.0); (322890.0, 3784422.0, 197.3, 870.4, 0.0);
(322900.0, 3784422.0, 197.1, 870.4, 0.0); (322910.0, 3784422.0, 196.9, 870.4, 0.0);
(322920.0, 3784422.0, 196.7, 870.4, 0.0); (322950.0, 3784422.0, 196.5, 870.4, 0.0);
(322960.0, 3784422.0, 196.3, 870.4, 0.0); (322860.0, 3784432.0, 197.5, 870.4, 0.0);
(322870.0, 3784432.0, 197.8, 870.4, 0.0); (322880.0, 3784432.0, 197.8, 870.4, 0.0);
(322890.0, 3784432.0, 197.6, 870.4, 0.0); (322900.0, 3784432.0, 197.4, 870.4, 0.0);
(322910.0, 3784432.0, 197.2, 870.4, 0.0); (322920.0, 3784432.0, 197.0, 870.4, 0.0);
(322950.0, 3784432.0, 196.7, 870.4, 0.0); (322960.0, 3784432.0, 196.5, 870.4, 0.0);
(322860.0, 3784442.0, 197.7, 870.4, 0.0); (322870.0, 3784442.0, 198.0, 870.4, 0.0);
(322880.0, 3784442.0, 198.0, 870.4, 0.0); (322890.0, 3784442.0, 197.8, 870.4, 0.0);
(322900.0, 3784442.0, 197.6, 870.4, 0.0); (322910.0, 3784442.0, 197.4, 870.4, 0.0);
(322920.0, 3784442.0, 197.2, 870.4, 0.0); (322950.0, 3784442.0, 196.9, 870.4, 0.0);
(322960.0, 3784442.0, 196.7, 870.4, 0.0); (322950.0, 3784452.0, 197.1, 870.4, 0.0);
(322960.0, 3784452.0, 196.8, 870.4, 0.0); (322860.0, 3784462.0, 198.2, 870.4, 0.0);
(322870.0, 3784462.0, 198.4, 870.4, 0.0); (322880.0, 3784462.0, 198.4, 870.4, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(322890.0, 3784462.0, 198.1, 870.4, 0.0); (322900.0, 3784462.0, 197.9, 870.4, 0.0);
(322910.0, 3784462.0, 197.7, 870.4, 0.0); (322920.0, 3784462.0, 197.5, 870.4, 0.0);
(322950.0, 3784462.0, 197.2, 870.4, 0.0); (322960.0, 3784462.0, 196.9, 870.4, 0.0);
(322860.0, 3784472.0, 198.4, 870.4, 0.0); (322870.0, 3784472.0, 198.6, 870.4, 0.0);
(322880.0, 3784472.0, 198.6, 870.4, 0.0); (322890.0, 3784472.0, 198.3, 870.4, 0.0);
(322900.0, 3784472.0, 198.0, 870.4, 0.0); (322910.0, 3784472.0, 197.8, 870.4, 0.0);
(322920.0, 3784472.0, 197.6, 870.4, 0.0); (322950.0, 3784472.0, 197.3, 870.4, 0.0);
(322960.0, 3784472.0, 197.0, 870.4, 0.0); (322860.0, 3784482.0, 198.7, 870.4, 0.0);
(322870.0, 3784482.0, 198.9, 870.4, 0.0); (322880.0, 3784482.0, 198.8, 870.4, 0.0);
(322890.0, 3784482.0, 198.5, 870.4, 0.0); (322900.0, 3784482.0, 198.2, 870.4, 0.0);
(322910.0, 3784482.0, 198.0, 870.4, 0.0); (322920.0, 3784482.0, 197.8, 870.4, 0.0);
(322950.0, 3784482.0, 197.4, 870.4, 0.0); (322960.0, 3784482.0, 197.1, 870.4, 0.0);
(322860.0, 3784492.0, 199.0, 870.4, 0.0); (322870.0, 3784492.0, 199.2, 870.4, 0.0);
(322880.0, 3784492.0, 199.2, 870.4, 0.0); (322890.0, 3784492.0, 198.8, 870.4, 0.0);
(322900.0, 3784492.0, 198.5, 870.4, 0.0); (322910.0, 3784492.0, 198.2, 870.4, 0.0);
(322920.0, 3784492.0, 197.9, 870.4, 0.0); (322950.0, 3784492.0, 197.5, 870.4, 0.0);
(322960.0, 3784492.0, 197.2, 870.4, 0.0); (322860.0, 3784502.0, 199.3, 870.4, 0.0);
(322870.0, 3784502.0, 199.5, 870.4, 0.0); (322880.0, 3784502.0, 199.5, 870.4, 0.0);
(322890.0, 3784502.0, 199.2, 870.4, 0.0); (322900.0, 3784502.0, 198.8, 870.4, 0.0);

```
    ( 322910.0, 3784502.0,     198.4,     870.4,       0.0);         ( 322920.0, 3784502.0,     198.1,     870.4,       0.0);
    ( 322950.0, 3784502.0,     197.6,     870.4,       0.0);         ( 322960.0, 3784502.0,     197.4,     870.4,       0.0);
    ( 322860.0, 3784512.0,     199.6,     870.4,       0.0);         ( 322870.0, 3784512.0,     199.8,     870.4,       0.0);
    ( 322880.0, 3784512.0,     199.8,     870.4,       0.0);         ( 322890.0, 3784512.0,     199.4,     870.4,       0.0);
    ( 322900.0, 3784512.0,     199.0,     870.4,       0.0);         ( 322910.0, 3784512.0,     198.6,     870.4,       0.0);
    ( 322920.0, 3784512.0,     198.3,     870.4,       0.0);         ( 322950.0, 3784512.0,     197.8,     870.4,       0.0);
    ( 322960.0, 3784512.0,     197.5,     870.4,       0.0);         ( 322860.0, 3784522.0,     199.8,     870.4,       0.0);
    ( 322870.0, 3784522.0,     199.9,     870.4,       0.0);         ( 322880.0, 3784522.0,     199.8,     870.4,       0.0);
    ( 322890.0, 3784522.0,     199.5,     870.4,       0.0);         ( 322900.0, 3784522.0,     199.1,     870.4,       0.0);
    ( 322910.0, 3784522.0,     198.8,     870.4,       0.0);         ( 322920.0, 3784522.0,     198.4,     870.4,       0.0);
    ( 322950.0, 3784522.0,     198.0,     870.4,       0.0);         ( 322960.0, 3784522.0,     197.7,     870.4,       0.0);
    ( 322950.0, 3784532.0,     198.3,     870.4,       0.0);         ( 322960.0, 3784532.0,     198.0,     870.4,       0.0);
    ( 322860.0, 3784542.0,     200.1,     870.4,       0.0);         ( 322870.0, 3784542.0,     200.0,     870.4,       0.0);
    ( 322880.0, 3784542.0,     199.9,     870.4,       0.0);         ( 322890.0, 3784542.0,     199.6,     870.4,       0.0);
    ( 322900.0, 3784542.0,     199.2,     870.4,       0.0);         ( 322910.0, 3784542.0,     199.0,     870.4,       0.0);
    ( 322920.0, 3784542.0,     198.7,     870.4,       0.0);         ( 322950.0, 3784542.0,     198.4,     870.4,       0.0);
    ( 322960.0, 3784542.0,     198.1,     870.4,       0.0);         ( 322860.0, 3784552.0,     200.2,     870.4,       0.0);
    ( 322870.0, 3784552.0,     200.1,     870.4,       0.0);         ( 322880.0, 3784552.0,     199.9,     870.4,       0.0);
    ( 322890.0, 3784552.0,     199.6,     870.4,       0.0);         ( 322900.0, 3784552.0,     199.2,     870.4,       0.0);
    ( 322910.0, 3784552.0,     199.0,     870.4,       0.0);         ( 322920.0, 3784552.0,     198.7,     870.4,       0.0);
    ( 322950.0, 3784552.0,     198.5,     870.4,       0.0);         ( 322960.0, 3784552.0,     198.2,     870.4,       0.0);
    ( 322900.0, 3784562.0,     199.3,     870.4,       0.0);         ( 322910.0, 3784562.0,     199.0,     870.4,       0.0);
    ( 322920.0, 3784562.0,     198.8,     870.4,       0.0);         ( 322950.0, 3784562.0,     198.5,     870.4,       0.0);
    ( 322960.0, 3784562.0,     198.3,     870.4,       0.0);         ( 322950.0, 3784572.0,     198.5,     870.4,       0.0);
    ( 322960.0, 3784572.0,     198.4,     870.4,       0.0);         ( 322805.0, 3784362.0,     195.9,     870.4,       0.0);
    ( 322815.0, 3784362.0,     196.0,     870.4,       0.0);         ( 322805.0, 3784372.0,     196.1,     870.4,       0.0);
```


*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
    ( 322815.0, 3784372.0,     196.2,     870.4,       0.0);         ( 322805.0, 3784382.0,     196.3,     870.4,       0.0);
    ( 322815.0, 3784382.0,     196.4,     870.4,       0.0);         ( 322805.0, 3784392.0,     196.5,     870.4,       0.0);
    ( 322815.0, 3784392.0,     196.5,     870.4,       0.0);         ( 322805.0, 3784402.0,     196.6,     870.4,       0.0);
    ( 322815.0, 3784402.0,     196.6,     870.4,       0.0);         ( 322805.0, 3784412.0,     196.7,     870.4,       0.0);
    ( 322815.0, 3784412.0,     196.7,     870.4,       0.0);         ( 322805.0, 3784422.0,     196.8,     870.4,       0.0);
    ( 322815.0, 3784422.0,     196.8,     870.4,       0.0);         ( 322805.0, 3784432.0,     196.9,     870.4,       0.0);
    ( 322815.0, 3784432.0,     196.9,     870.4,       0.0);         ( 322805.0, 3784442.0,     197.0,     870.4,       0.0);
    ( 322815.0, 3784442.0,     197.0,     870.4,       0.0);         ( 322805.0, 3784452.0,     197.2,     870.4,       0.0);
    ( 322815.0, 3784452.0,     197.2,     870.4,       0.0);         ( 322805.0, 3784462.0,     197.4,     870.4,       0.0);
    ( 322815.0, 3784462.0,     197.4,     870.4,       0.0);         ( 322805.0, 3784472.0,     197.7,     870.4,       0.0);
    ( 322815.0, 3784472.0,     197.6,     870.4,       0.0);         ( 322805.0, 3784482.0,     197.9,     870.4,       0.0);
    ( 322815.0, 3784482.0,     197.8,     870.4,       0.0);         ( 322805.0, 3784492.0,     198.1,     870.4,       0.0);
    ( 322815.0, 3784492.0,     198.1,     870.4,       0.0);         ( 322805.0, 3784502.0,     198.4,     870.4,       0.0);
    ( 322815.0, 3784502.0,     198.3,     870.4,       0.0);         ( 322805.0, 3784512.0,     198.7,     870.4,       0.0);
    ( 322815.0, 3784512.0,     198.6,     870.4,       0.0);         ( 322805.0, 3784522.0,     199.2,     870.4,       0.0);
    ( 322815.0, 3784522.0,     199.1,     870.4,       0.0);         ( 322805.0, 3784532.0,     199.7,     870.4,       0.0);
    ( 322815.0, 3784532.0,     199.6,     870.4,       0.0);
```


*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1  1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: E:\WD Passport\2150 hillcrest drive\metdata\Thousand Oaks_2015-2017.SFC Met Version: 18081
Profile file: E:\WD Passport\2150 hillcrest drive\metdata\Thousand Oaks_2015-2017.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 93110 Upper air station no.: 93214
Name: OXNARD AIRPORT, CA Name: VANDENBERG AFB, CA
Year: 2015 Year: 2015

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
15	01	01	1	01	- 2.8	0.059	-9.000	-9.000	-999.	34.	6.3	0.33	1.11	1.00	1.00	112.	10.0	275.4	10.0
15	01	01	1	02	- 5.2	0.079	-9.000	-9.000	-999.	53.	8.3	0.29	1.11	1.00	1.40	129.	10.0	274.6	10.0
15	01	01	1	03	- 3.9	0.068	-9.000	-9.000	-999.	42.	7.1	0.29	1.11	1.00	1.20	126.	10.0	274.2	10.0
15	01	01	1	04	- 6.0	0.084	-9.000	-9.000	-999.	59.	8.8	0.29	1.11	1.00	1.50	126.	10.0	273.6	10.0
15	01	01	1	05	- 6.0	0.084	-9.000	-9.000	-999.	59.	8.8	0.29	1.11	1.00	1.50	127.	10.0	273.8	10.0
15	01	01	1	06	- 8.7	0.101	-9.000	-9.000	-999.	77.	10.6	0.29	1.11	1.00	1.80	127.	10.0	274.0	10.0
15	01	01	1	07	-14.2	0.130	-9.000	-9.000	-999.	112.	13.5	0.29	1.11	1.00	2.30	146.	10.0	273.5	10.0
15	01	01	1	08	- 8.9	0.107	-9.000	-9.000	-999.	84.	12.2	0.29	1.11	0.56	1.90	127.	10.0	275.0	10.0
15	01	01	1	09	21.5	0.201	0.313	0.005	50.	216.	-33.3	0.29	1.11	0.31	1.50	141.	10.0	278.9	10.0
15	01	01	1	10	73.9	0.245	0.561	0.005	85.	291.	-17.6	0.34	1.11	0.23	1.60	163.	10.0	281.6	10.0
15	01	01	1	11	111.3	0.090	1.400	0.010	873.	89.	- 1.0	0.35	1.11	0.20	0.28	66.	10.0	284.5	10.0
15	01	01	1	12	130.4	0.081	1.493	0.009	903.	56.	- 1.0	0.21	1.11	0.19	0.28	273.	10.0	286.2	10.0
15	01	01	1	13	130.0	0.204	1.508	0.008	932.	220.	- 5.7	0.21	1.11	0.19	1.30	297.	10.0	286.2	10.0
15	01	01	1	14	111.0	0.147	1.443	0.007	957.	136.	- 2.5	0.21	1.11	0.20	0.80	281.	10.0	286.9	10.0
15	01	01	1	15	73.6	0.324	1.266	0.006	973.	443.	-40.8	0.21	1.11	0.23	2.70	281.	10.0	286.5	10.0
15	01	01	1	16	21.1	0.359	0.838	0.006	982.	516.	-193.4	0.21	1.11	0.32	3.30	280.	10.0	285.8	10.0
15	01	01	1	17	-23.3	0.245	-9.000	-9.000	-999.	298.	55.7	0.21	1.11	0.57	2.90	282.	10.0	284.4	10.0
15	01	01	1	18	- 2.1	0.048	-9.000	-9.000	-999.	111.	4.6	0.15	1.11	1.00	1.00	309.	10.0	282.5	10.0
15	01	01	1	19	- 2.8	0.059	-9.000	-9.000	-999.	36.	6.3	0.33	1.11	1.00	1.00	100.	10.0	280.9	10.0
15	01	01	1	20	- 2.7	0.056	-9.000	-9.000	-999.	32.	5.9	0.29	1.11	1.00	1.00	123.	10.0	279.2	10.0
15	01	01	1	21	- 6.0	0.084	-9.000	-9.000	-999.	59.	8.9	0.29	1.11	1.00	1.50	134.	10.0	278.4	10.0
15	01	01	1	22	- 2.2	0.051	-9.000	-9.000	-999.	27.	5.3	0.29	1.11	1.00	0.90	127.	10.0	277.6	10.0
15	01	01	1	23	- 3.2	0.062	-9.000	-9.000	-999.	37.	6.5	0.29	1.11	1.00	1.10	128.	10.0	276.5	10.0
15	01	01	1	24	- 3.2	0.062	-9.000	-9.000	-999.	37.	6.5	0.29	1.11	1.00	1.10	127.	10.0	275.8	10.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
15	01	01	01	10.0	1	112.	1.00	275.5	19.8	-99.00	0.33

F indicates top of profile (=1) or below (=0)

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 3 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): C_1 , C_2 , C_3 , C_4 , C_5 ,
C_6 , C_7 , C_8 , C_9 , C_10 , C_11 , C_12 , C_13 ,
C_14 , C_15 , C_16 , C_17 , C_18 , C_19 , C_20 , C_21 ,
C_22 , C_23 , C_24 , C_25 , C_26 , C_27 , C_28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
322950.00	3784342.00	0.00251	322960.00	3784342.00	0.00234
322860.00	3784352.00	0.00553	322870.00	3784352.00	0.00500
322880.00	3784352.00	0.00455	322890.00	3784352.00	0.00415
322900.00	3784352.00	0.00380	322910.00	3784352.00	0.00350

322920.00	3784352.00	0.00323	322950.00	3784352.00	0.00257
322960.00	3784352.00	0.00239	322860.00	3784362.00	0.00582
322870.00	3784362.00	0.00524	322880.00	3784362.00	0.00474
322890.00	3784362.00	0.00431	322900.00	3784362.00	0.00393
322910.00	3784362.00	0.00360	322920.00	3784362.00	0.00331
322950.00	3784362.00	0.00262	322960.00	3784362.00	0.00243
322950.00	3784372.00	0.00265	322960.00	3784372.00	0.00246
322860.00	3784382.00	0.00620	322870.00	3784382.00	0.00554
322880.00	3784382.00	0.00498	322890.00	3784382.00	0.00450
322900.00	3784382.00	0.00409	322910.00	3784382.00	0.00373
322920.00	3784382.00	0.00341	322950.00	3784382.00	0.00266
322960.00	3784382.00	0.00246	322860.00	3784392.00	0.00630
322870.00	3784392.00	0.00562	322880.00	3784392.00	0.00504
322890.00	3784392.00	0.00455	322900.00	3784392.00	0.00412
322910.00	3784392.00	0.00375	322920.00	3784392.00	0.00342
322950.00	3784392.00	0.00266	322960.00	3784392.00	0.00246
322860.00	3784402.00	0.00636	322870.00	3784402.00	0.00566
322880.00	3784402.00	0.00506	322890.00	3784402.00	0.00455
322900.00	3784402.00	0.00412	322910.00	3784402.00	0.00374
322920.00	3784402.00	0.00341	322950.00	3784402.00	0.00263
322960.00	3784402.00	0.00243	322860.00	3784412.00	0.00636
322870.00	3784412.00	0.00565	322880.00	3784412.00	0.00504
322890.00	3784412.00	0.00453	322900.00	3784412.00	0.00409
322910.00	3784412.00	0.00371	322920.00	3784412.00	0.00337
322950.00	3784412.00	0.00259	322960.00	3784412.00	0.00239
322860.00	3784422.00	0.00632	322870.00	3784422.00	0.00560
322880.00	3784422.00	0.00499	322890.00	3784422.00	0.00447
322900.00	3784422.00	0.00403	322910.00	3784422.00	0.00365
322920.00	3784422.00	0.00331	322950.00	3784422.00	0.00254
322960.00	3784422.00	0.00234	322860.00	3784432.00	0.00624
322870.00	3784432.00	0.00551	322880.00	3784432.00	0.00490
322890.00	3784432.00	0.00439	322900.00	3784432.00	0.00394
322910.00	3784432.00	0.00356	322920.00	3784432.00	0.00323
322950.00	3784432.00	0.00247	322960.00	3784432.00	0.00227
322860.00	3784442.00	0.00612	322870.00	3784442.00	0.00539
322880.00	3784442.00	0.00478	322890.00	3784442.00	0.00427

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 3 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): C_1 , C_2 , C_3 , C_4 , C_5 ,
C_6 , C_7 , C_8 , C_9 , C_10 , C_11 , C_12 , C_13 ,
C_14 , C_15 , C_16 , C_17 , C_18 , C_19 , C_20 , C_21 ,
C_22 , C_23 , C_24 , C_25 , C_26 , C_27 , C_28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
322900.00	3784442.00	0.00383	322910.00	3784442.00	0.00346
322920.00	3784442.00	0.00313	322950.00	3784442.00	0.00238
322960.00	3784442.00	0.00219	322950.00	3784452.00	0.00228
322960.00	3784452.00	0.00210	322860.00	3784462.00	0.00574
322870.00	3784462.00	0.00503	322880.00	3784462.00	0.00445
322890.00	3784462.00	0.00395	322900.00	3784462.00	0.00354
322910.00	3784462.00	0.00318	322920.00	3784462.00	0.00287
322950.00	3784462.00	0.00217	322960.00	3784462.00	0.00200
322860.00	3784472.00	0.00549	322870.00	3784472.00	0.00480
322880.00	3784472.00	0.00423	322890.00	3784472.00	0.00375
322900.00	3784472.00	0.00335	322910.00	3784472.00	0.00301
322920.00	3784472.00	0.00272	322950.00	3784472.00	0.00206
322960.00	3784472.00	0.00189	322860.00	3784482.00	0.00520
322870.00	3784482.00	0.00453	322880.00	3784482.00	0.00399
322890.00	3784482.00	0.00353	322900.00	3784482.00	0.00315
322910.00	3784482.00	0.00283	322920.00	3784482.00	0.00255
322950.00	3784482.00	0.00193	322960.00	3784482.00	0.00177
322860.00	3784492.00	0.00486	322870.00	3784492.00	0.00422
322880.00	3784492.00	0.00371	322890.00	3784492.00	0.00328
322900.00	3784492.00	0.00293	322910.00	3784492.00	0.00263
322920.00	3784492.00	0.00237	322950.00	3784492.00	0.00180

322960.00	3784492.00	0.00165	322860.00	3784502.00	0.00446
322870.00	3784502.00	0.00387	322880.00	3784502.00	0.00340
322890.00	3784502.00	0.00301	322900.00	3784502.00	0.00269
322910.00	3784502.00	0.00242	322920.00	3784502.00	0.00219
322950.00	3784502.00	0.00166	322960.00	3784502.00	0.00153
322860.00	3784512.00	0.00403	322870.00	3784512.00	0.00349
322880.00	3784512.00	0.00307	322890.00	3784512.00	0.00273
322900.00	3784512.00	0.00244	322910.00	3784512.00	0.00220
322920.00	3784512.00	0.00200	322950.00	3784512.00	0.00152
322960.00	3784512.00	0.00140	322860.00	3784522.00	0.00356
322870.00	3784522.00	0.00310	322880.00	3784522.00	0.00273
322890.00	3784522.00	0.00244	322900.00	3784522.00	0.00219
322910.00	3784522.00	0.00198	322920.00	3784522.00	0.00180
322950.00	3784522.00	0.00139	322960.00	3784522.00	0.00128
322950.00	3784532.00	0.00126	322960.00	3784532.00	0.00116
322860.00	3784542.00	0.00263	322870.00	3784542.00	0.00233
322880.00	3784542.00	0.00208	322890.00	3784542.00	0.00188
322900.00	3784542.00	0.00171	322910.00	3784542.00	0.00156
322920.00	3784542.00	0.00144	322950.00	3784542.00	0.00113

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 3 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): C_1 , C_2 , C_3 , C_4 , C_5 ,
C_6 , C_7 , C_8 , C_9 , C_10 , C_11 , C_12 , C_13 ,
C_14 , C_15 , C_16 , C_17 , C_18 , C_19 , C_20 , C_21 ,
C_22 , C_23 , C_24 , C_25 , C_26 , C_27 , C_28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
322960.00	3784542.00	0.00105	322860.00	3784552.00	0.00221
322870.00	3784552.00	0.00198	322880.00	3784552.00	0.00179
322890.00	3784552.00	0.00163	322900.00	3784552.00	0.00150
322910.00	3784552.00	0.00138	322920.00	3784552.00	0.00127
322950.00	3784552.00	0.00102	322960.00	3784552.00	0.00095
322900.00	3784562.00	0.00130	322910.00	3784562.00	0.00121
322920.00	3784562.00	0.00112	322950.00	3784562.00	0.00091
322960.00	3784562.00	0.00086	322950.00	3784572.00	0.00082
322960.00	3784572.00	0.00077	322805.00	3784362.00	0.01222
322815.00	3784362.00	0.01049	322805.00	3784372.00	0.01300
322815.00	3784372.00	0.01110	322805.00	3784382.00	0.01357
322815.00	3784382.00	0.01154	322805.00	3784392.00	0.01398
322815.00	3784392.00	0.01184	322805.00	3784402.00	0.01425
322815.00	3784402.00	0.01204	322805.00	3784412.00	0.01441
322815.00	3784412.00	0.01216	322805.00	3784422.00	0.01450
322815.00	3784422.00	0.01220	322805.00	3784432.00	0.01452
322815.00	3784432.00	0.01218	322805.00	3784442.00	0.01446
322815.00	3784442.00	0.01210	322805.00	3784452.00	0.01437
322815.00	3784452.00	0.01197	322805.00	3784462.00	0.01420
322815.00	3784462.00	0.01176	322805.00	3784472.00	0.01399
322815.00	3784472.00	0.01148	322805.00	3784482.00	0.01363
322815.00	3784482.00	0.01111	322805.00	3784492.00	0.01313
322815.00	3784492.00	0.01063	322805.00	3784502.00	0.01245
322815.00	3784502.00	0.01000	322805.00	3784512.00	0.01155
322815.00	3784512.00	0.00921	322805.00	3784522.00	0.01033
322815.00	3784522.00	0.00820	322805.00	3784532.00	0.00880
322815.00	3784532.00	0.00696			

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 3 YEARS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	0.01452 AT	(322805.00, 3784432.00, 196.90, 870.40, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.01450 AT	(322805.00, 3784422.00, 196.80, 870.40, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.01446 AT	(322805.00, 3784442.00, 197.00, 870.40, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.01441 AT	(322805.00, 3784412.00, 196.70, 870.40, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.01437 AT	(322805.00, 3784452.00, 197.20, 870.40, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.01425 AT	(322805.00, 3784402.00, 196.60, 870.40, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.01420 AT	(322805.00, 3784462.00, 197.40, 870.40, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.01399 AT	(322805.00, 3784472.00, 197.70, 870.40, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.01398 AT	(322805.00, 3784392.00, 196.50, 870.40, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.01363 AT	(322805.00, 3784482.00, 197.90, 870.40, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 214 Informational Message(s)

A Total of 26304 Hours Were Processed

A Total of 0 Calm Hours Identified

A Total of 214 Missing Hours Identified (0.81 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********

ME W186	621	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
MX W403	621	PFLCNV: Turbulence data is being used w/o ADJ_U* option	SigA Data

****
*** AERMOD Finishes Successfully ***
****

ATTACHMENT E

List of References

1. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 2017. *Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size.* ANSI/ASHRAE Standard 52.2-2017.

2. California Air Pollution Control Officers Association (CAPCOA), 1987. *Toxic Air Pollutant Source Assessment Manual for California Air Pollution Control Districts and Applicants for Air Pollution Control District Permits,* prepared by Interagency Workshop Group, (Revised) December 1989.

3. California Air Resources Board, 1997. *Methods for Assessing Area Source Emissions in California: Volume III* (Revised).

4. California Air Resources Board, 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*.

5. California Air Resources Board, 2020. *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values*.

6. California Code of Regulations, Title 22, Section 12703.

7. California Code of Regulations, Section 93001.

8. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, 2015. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.

9. California Health and Safety Code, Section 44360.

10. City of Thousand Oaks, Community Development Department, 2021. Staff Report - Residential Capacity Allocation and Initiation of General Plan Amendment for a Project Located at 2150 West Hillcrest Drive (LU 2021-70169/Prescreening RCA 2021-70168); Applicant: Amgen Inc.

11. City of Thousand Oaks, Community Development Department, 2022. Notice of Preparation and Public Scoping Meeting for the Latigo Hillcrest Project Draft Environmental Impact Report.

12. Envicom Corporation, 2023. CalEEMod output files - Latigo Hillcrest Mixed Use Project - Ventura County.

13. KTGY, 2021. 2150 Hillcrest Drive, Thousand Oaks, California, Formal Submittal.

14. United States Environmental Protection Agency, Office of Emergency and Remedial Response, Toxics Integration Branch, December 1989. *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Part A, Interim Final*. EPA-540/1-89-002.

15. United States Environmental Protection Agency, Office of Emergency and Remedial Response, Toxics Integration Branch, March 1991. *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Supplemental Guidance, Standard Default Exposure Factors, Interim Final*. OSWER 9285.6-03.

16. United States Environmental Protection Agency, Office of Air Quality Planning and Standards, 1995. *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition. AP-42.

17. United States Environmental Protection Agency, Office of Research and Development, 1997. *Exposure Factors Handbook*.

18. United States Environmental Protection Agency, Office of Research and Development, 2002. *Health Assessment Document for Diesel Exhaust*. EPA/600/8-90/057F.

19. United States Environmental Protection Agency, 2015. Handbook for Implementing the Supplemental Cancer Guidance at Waste and Cleanup Sites. Website: http://www.epa.gov/oswer/riskassessment/sghandbook/chemicals.htm.

20. United States Environmental Protection Agency, 2016. *User's Guide for the AMS/EPA Regulatory Model - AERMOD*. EPA-454/B-16-011.

21. United States Environmental Protection Agency, 2016. *AERMOD Implementation Guide.* EPA-454/B-16-013.

22. United States Environmental Protection Agency, 2017. Guideline on Air Quality Models (Final Rule). 40 CFR Part 51.

23. South Coast Air Quality Management District, 2008. *Final Localized Significance Threshold Methodology*.

24. Ventura County Air Pollution Control District (VCAPCD), Meteorological Data Set for Thousand Oaks.

25. Ventura County Air Pollution Control District, 2003. *Ventura County Air Quality Assessment Guidelines.*