Valor Elementary School Project

Air Quality and Greenhouse Gas Study

prepared for

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1 Project Description and Impact Summary

1.1 Introduction

This study analyzes the potential air quality and greenhouse gas (GHG) impacts of the proposed Valor Elementary School Project (herein referred to as "Proposed Project" or "Project") located in the Mission Hills-Panorama City-North Hills Community Plan Area in Los Angeles, California. Rincon Consultants, Inc. (Rincon) prepared this study under contract to Bright Star Schools for the City of Los Angeles to use in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). The purpose of this study is to analyze the Project's air quality and GHG impacts related to both temporary construction activity and long-term operation of the Project. The conclusions of this study are summarized in Table 1, followed by the Regulatory Compliance Measures (RCMs) required for the Project.

Table 1 Summary of Impacts

Impact Statement	Proposed Project's Level of Significance	Applicable RCMs/ Identified Mitigation
Air Quality		
Conflict with or obstruct implementation of the applicable air quality plan?	No impact	None
Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or state ambient air quality standard?	Less than significant impact	RCM-1 and RCM-3 through RCM-5
Expose sensitive receptors to substantial pollutant concentrations?	Less than significant impact with mitigation incorporated	RCM-1, RCM-3, and RCM-4, MM AQ-3
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than significant impact	RCM-2
Greenhouse Gas Emissions		
Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	Less than significant impact	None
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs	Less than significant impact	None

Regulatory Compliance Measures

RCMs are existing requirements and reasonably anticipated standard conditions that are based on local, State, or federal regulations and laws that are frequently required independently of CEQA review and serve to offset or prevent specific impacts. RCMs are not included as mitigation measures in the environmental clearance document because the Project is required to comply with RCMs through State and local regulations.

RCM-1 Demolition, Grading, and Construction Activities: Compliance with Provisions of SCAQMD Rule 403

The Project shall comply with all applicable standards of Southern California Air Quality Management District (SCAQMD) Rule 403, including the following provisions:

- All unpaved demolition and construction areas shall be wetted at least twice daily during excavation and construction, and temporary dust covers shall be used to reduce dust emissions and meet SCAQMD Rule 403. Wetting could reduce fugitive dust by as much as 50 percent.
- The construction area shall be kept sufficiently dampened to control dust caused by grading and hauling, and at all times provide reasonable control of dust caused by wind.
- All clearing, earth moving, or excavation activities shall be discontinued during periods of high winds (i.e., greater than 15 mph), in order to prevent excessive amounts of dust.
- All dirt/soil shall be secured by trimming, watering, or other appropriate means to prevent spillage and dust.
- All dirt/soil materials transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- General contractors shall maintain and operate construction equipment to minimize exhaust emissions.
- Trucks having no current hauling activity shall not idle but be turned off.

RCM-2 Odors: Compliance with Provisions of SCAQMD Rule 402

The Project shall comply with the following provision of SCAQMD Rule 402: a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

RCM-3 Engine Idling

In accordance with Section 2485 of Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to five minutes at any location.

RCM-4 Emission Standards

In accordance with Section 93115 of Title 17 of the California Code of Regulations, operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

RCM-5 Architectural Coatings: Compliance with SCAQMD Rule 1113

The Project shall comply with SCAQMD Rule 1113 limiting the volatile organic compound (VOC) content of architectural coatings.

1.2 Project Summary

Project Location and Existing Conditions

The Project Site is located at 15526-15544 Plummer Street, in the Mission Hills - Panorama City - North Hills Community Plan Area in the City of Los Angeles. The Project Site encompasses approximately 2.06 acres (approximately 89,629 square feet [sf]) and consists of two parcels identified by Assessor Parcel Numbers (APN) 265-601-5007, which is approximately 1.30 acres in size, and APN 265-601-5008, which is approximately 0.76 acre in size. The 1.30-acre parcel is currently undeveloped and covered with grasses, shrubs, and various mature trees, and the 0.76-acre parcel is currently developed with a one-story single-family residence with similar vegetation as the larger parcel. The entire Project Site is relatively flat. The on-site single-family residence located at 15526 West Plummer Street was built in 1914 and is listed in SurveyLA. Therefore, the residence is recognized by the City as having historic significance.

The Project Site is bordered by Plummer Street to the north, with single-family residences beyond; single- and multi-family residences to the east, with an apartment building for senior citizens (Plummer Village Senior Community) beyond; single- and multi-family residences to the south, with Vincennes Street beyond; and single-family residences to the west, with Orion Avenue beyond. The Project Site is located approximately 440 feet east of Interstate 405 (I-405). See Figure 1 for and Figure 2 for the Project Site location in a regional context and local context, respectively.

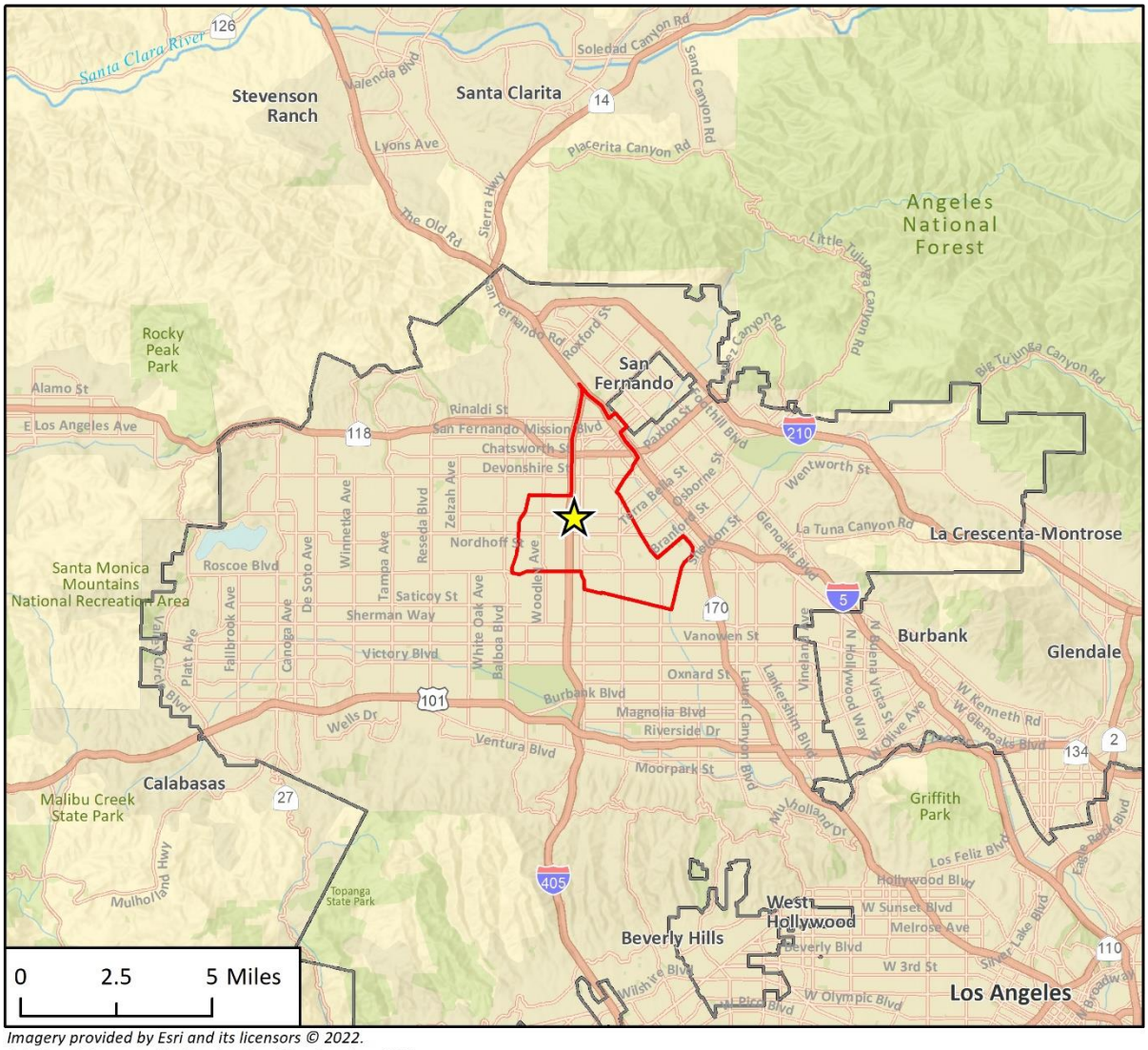
Project Description

The Proposed Project involves the construction of a one and two-story, 26.5-foot-tall elementary school building with 28 classrooms (totaling 23,538 sf) for grades transitional kindergarten through fourth, a multi-purpose room (totaling 3,182 sf), administrative spaces (totaling 1,616 sf), corridors, support, and covered outdoor dining (totaling 6,419 sf), and a surface parking lot with an ingress/egress driveway off Plummer Street. The elementary school building would have a total building area of 34,755 sf and would accommodate a maximum enrollment of 552 students. The Project would also include 30,726 sf of open space and landscaping, including a kindergarten play area (totaling 1,300 sf), two play areas (totaling 13,060 sf), and various trees and shrubs. The on-site single-family residence would remain on the Site as part of the Project but would be adaptively reused for additional administrative space for the school and would include a conference room, counselor office, staff support space, and psychologist office. The existing restroom in the residence would remain. The Project would include a car drop-off and pick-up area and a total of 49 surface-level parking spaces including 17 standard, 21 compact, and two ADA spaces, and nine clean air spaces located along the southern and western portions of the Site. The Project would also include 112 short-term and three long-term bicycle parking spaces, for a total of 115 bicycle parking spaces. **Figure 3** illustrates the proposed site plan.

Project Construction

Project construction is expected to commence in September 2023. Construction activities would occur five days a week from 8:00 a.m. to 3:00 p.m. The Project would require cut of approximately 12,500 cubic yards (cy) of soil material. Of the 12,500 cy of cut soil, approximately 10,000 cy would be used as fill on site and the remaining 2,500 cy would be exported off the site. Construction is anticipated to end in September 2024, for a total construction period of approximately 12 months.

Figure 1 Regional Location Map



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Additional data provided by the City of Los Angeles, 2021.

Project Location

City of Los Angeles

Mission Hills – Panorama City – North Hills Plan Area

N

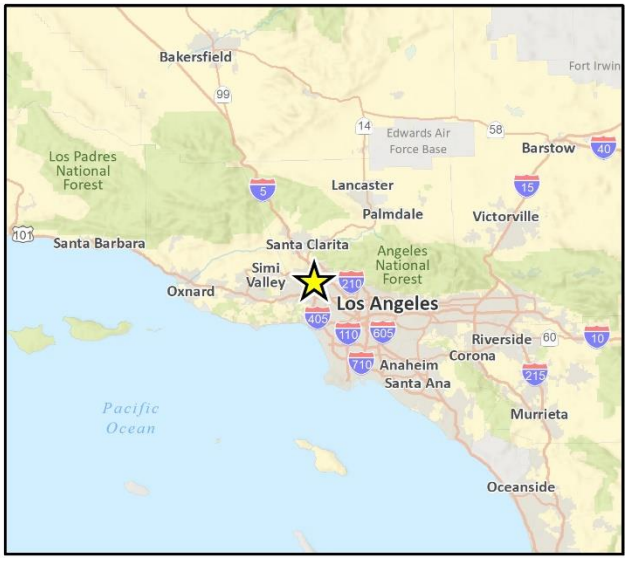
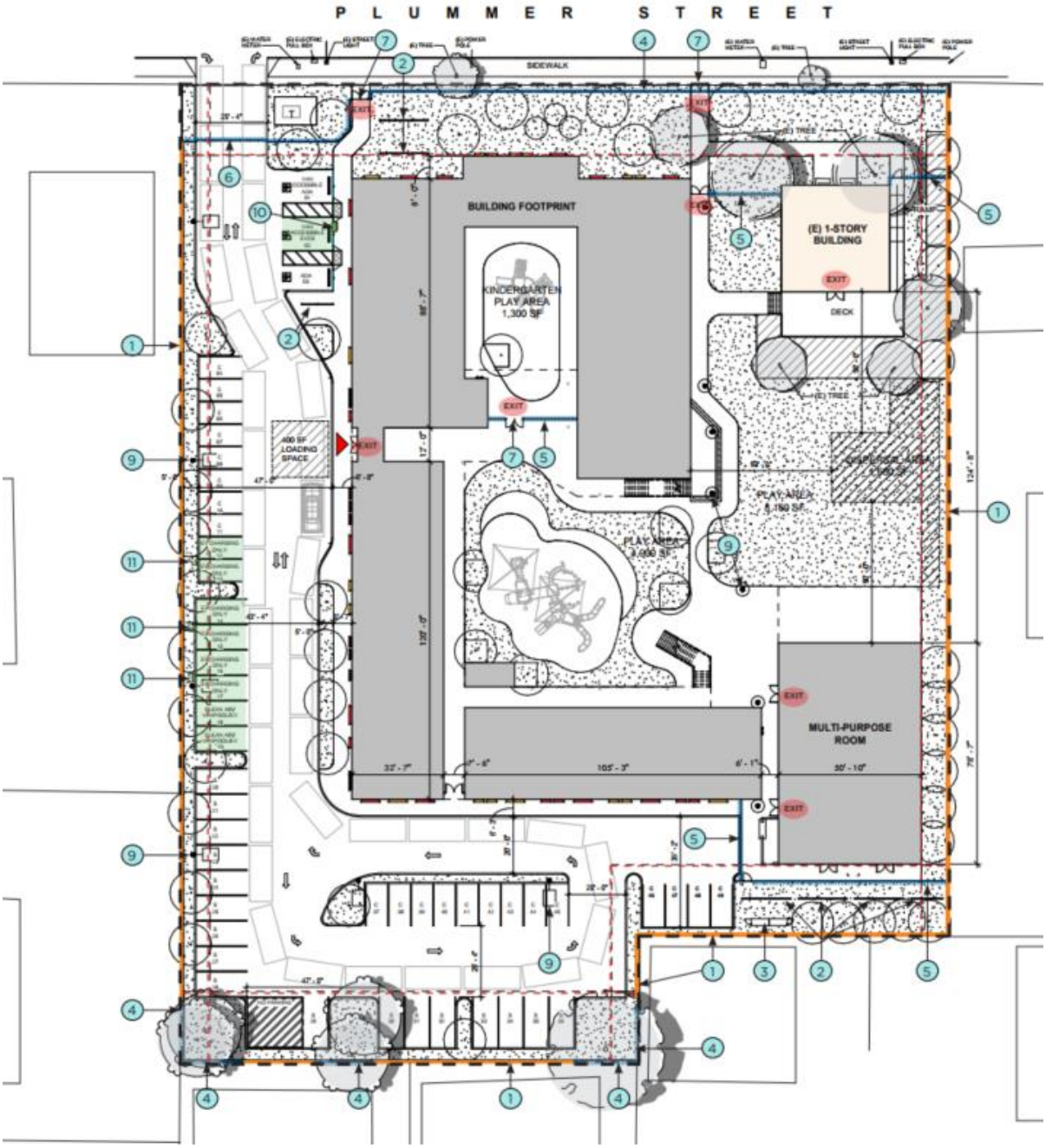


Figure 2 Project Site Location

Figure 3 Project Site Plan



2 Air Quality

2.1 Environmental and Regulatory Setting

Local Climate and Meteorology

The Project Site is in the South Coast Air Basin (SCAB), which is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The regional climate in the SCAB is semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality in the SCAB is primarily influenced by meteorology and a wide range of emission sources, such as dense population centers, substantial vehicular traffic, and industry.

Air pollutant emissions in the SCAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road mobile sources may be legally operated on roadways and highways. Off-road mobile sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Air Quality Regulation

Federal and California Clean Air Acts

The federal and State governments have established ambient air quality standards for the protection of public health. The United States Environmental Protection Agency (USEPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) is the State equivalent within the California Environmental Protection Agency (CalEPA). County-level air districts provide local management of air quality. CARB has established air quality standards and is responsible for the control of mobile emission sources, while the local air districts are responsible for enforcing standards and regulating stationary sources. CARB has established 15 air basins statewide, including the SCAB.

The USEPA has set primary national ambient air quality standards (NAAQS) for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter with diameters of up to ten microns (PM_{10}) and up to 2.5 microns ($PM_{2.5}$), and lead. Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. In addition, California has established health-based ambient air quality standards (known as the California ambient air quality standards [CAAQS]) for these and other pollutants, some of which are more stringent than the federal standards. **Error! Reference source not found.** lists the current federal and State standards for regulated pollutants.

Table 2 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	California Standards
Ozone	1-Hour	–	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
CO	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
NO_2	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
SO_2	Annual	.030 ppm	–
	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM_{10}	Annual	–	20 µg/m^3
	24-Hour	150 µg/m^3	50 µg/m^3
$PM_{2.5}$	Annual	12 µg/m^3	12 µg/m^3
	24-Hour	35 µg/m^3	–
Lead	30-Day Average	–	1.5 µg/m^3
	3-Month Average	0.15 µg/m^3	–
Visibility Reducing Particles	8-Hour	–	Extinction of 0.23 per kilometer
Sulfates	24-Hour	–	25 µg/m^3
Hydrogen Sulfide	1-Hour	–	0.03 ppm (42 µg/m^3)
Vinyl Chloride	24-Hour	–	0.01 ppm (26 µg/m^3)

ppm = parts per million; µg/m^3 = micrograms per cubic meter

Source: CARB 2016

SCAQMD is the designated air quality control agency in the SCAB, which is a non-attainment area for the federal standards for ozone and $PM_{2.5}$ and the State standards for ozone, PM_{10}, and $PM_{2.5}$. The Los Angeles County portion of the SCAB is also designated non-attainment for lead (SCAQMD 2016). The SCAB is designated unclassifiable or in attainment for all other federal and State standards.

Safer Affordable Fuel-Efficient Vehicles Rule

On September 27, 2019, the USEPA and the National Highway Safety Administration published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The Part One Rule revokes California's authority to set its own GHG emissions standards and zero-emission vehicle mandates in California. To account for the effects of the Part One Rule, CARB released off-model adjustment factors on November 20, 2019 to adjust criteria air pollutant emissions outputs from the EMission FACtor (EMFAC) model. The most recent EMFAC outputs are incorporated into the California Emissions Estimator Model (CalEEMod) version 2020.4.0.

Air Pollutants of Primary Concern

Primary criteria pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere. Primary criteria pollutants include CO, NO_2, PM_{10}, $PM_{2.5}$, SO_2, and lead. Ozone is considered a secondary criteria pollutant because it is created by atmospheric chemical and photochemical reactions between reactive organic gases (ROG) and nitrogen oxides

(NO_X). The following subsections describe the characteristics, sources, and health and atmospheric effects of critical air contaminants.

Ozone

Ozone is produced by a photochemical reaction (triggered by sunlight) between NO_X and ROG.[1] Nitrogen oxides are formed during the combustion of fuels, while ROG are formed during combustion and evaporation of organic solvents. Since O_3 requires sunlight to form, it usually occurs in substantial concentrations between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to O_3 include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

Carbon monoxide is a local pollutant that is found in high concentrations only near fuel combustion equipment and other sources of CO. The primary source of CO, a colorless, odorless, poisonous gas, is automobile traffic. Therefore, elevated concentrations are usually only found near areas of high traffic volumes. Carbon monoxide's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulty in people with chronic diseases, reduced lung capacity, and impaired mental abilities.

Nitrogen Dioxide

Nitrogen dioxide is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. Nitrogen dioxide is an acute irritant. A relationship between NO_2 and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Nitrogen dioxide absorbs blue light, gives a reddish-brown cast to the atmosphere, and reduces visibility. It can also contribute to the formation of ozone/smog and acid rain.

Sulfur Dioxide

Sulfur dioxide is a colorless, pungent, irritating gas formed primarily by the combustion of sulfur-containing fossil fuels. When SO_2 oxidizes in the atmosphere, it forms sulfur trioxide. Collectively, these pollutants are referred to as sulfur oxides (SO_X). In humid atmospheres, SO_2 can also form sulfuric acid mist, which can eventually react to produce sulfate particulates that can inhibit visibility. Combustion of high sulfur-content fuels is the major source of SO_2, while chemical plants, sulfur recovery plants, and metal processing are minor contributors. At sufficiently high concentrations, SO_2 irritates the upper respiratory tract. At lower concentrations, when in conjunction with particulates, SO_2 appears to do still greater harm by injuring lung tissues. This compound also constricts the breathing passages, especially in people with asthma and people involved in moderate to heavy exercise. Sulfur dioxide causes respiratory irritation, including wheezing, shortness of breath, and coughing. Long-term SO_2 exposure has been associated with

[1] CARB defines VOC and ROG similarly as, "any compound of carbon excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions (CARB 2009). For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions and the term ROG is used in this report.). SCAQMD uses the term VOC to denote organic precursors.

increased risk of mortality from respiratory or cardiovascular disease. Sulfur oxides, in combination with moisture and oxygen, can yellow leaves on plants, dissolve marble, and eat away iron and steel.

Suspended Particulates

Atmospheric particulate matter is comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. The particulates that are of particular concern are PM_{10} (small particulate matter that measures no more than 10 microns in diameter) and $PM_{2.5}$ (fine particulate matter that measures no more than 2.5 microns in diameter). The characteristics, sources, and potential health effects associated with PM_{10} and $PM_{2.5}$ can be different. Major man-made sources of PM_{10} are agricultural operations, industrial processes, combustion of fossil fuels, construction, demolition operations, and entrainment of road dust into the atmosphere. Natural sources include windblown dust, wildfire smoke, and sea spray salt. The finer $PM_{2.5}$ particulates are generally associated with combustion processes as well as formation in the atmosphere as a secondary pollutant through chemical reactions. $PM_{2.5}$ is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Lead

Lead is a metal found naturally in the environment, as well as in manufacturing products. Lead occurs in the atmosphere as particulate matter. The major sources of lead emissions historically have been mobile and industrial sources. In the early 1970s, the USEPA set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The USEPA completed the ban prohibiting the use of leaded gasoline in highway vehicles in December 1995. As a result of the USEPA's regulatory efforts to remove lead from gasoline, atmospheric lead concentrations have declined substantially over the past several decades. The most dramatic reductions in lead emissions occurred prior to 1990 due to the removal of lead from gasoline sold for most highway vehicles. Lead emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries in part due to national emissions standards for hazardous air pollutants (USEPA 2013). As a result of phasing out leaded gasoline, metal processing is currently the primary source of lead emissions. The highest levels of lead in the air are generally found near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. Lead may cause a range of health effects, including anemia, kidney disease, and neuromuscular and neurological dysfunction (in severe cases). The Proposed Project does not include any stationary sources of lead emissions. Therefore, implementation of the Project would not result in substantial emissions of lead, and this pollutant is not discussed further in this analysis.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial

operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engines that emit exhaust containing solid material known as diesel particulate matter (DPM; CARB 2022a). TACs are different than the criteria pollutants previously discussed because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

Current Air Quality

The SCAQMD operates a network of air quality monitoring stations throughout the SCAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and to determine whether ambient air quality meets the NAAQS and CAAQS. The monitoring station closest to the Project Site is the Reseda station located at 18330 Gault Street, approximately 4.7 miles southwest of the Project Site, which provides ozone, carbon monoxide, nitrogen dioxide and $PM_{2.5}$ data. PM_{10} concentrations were obtained from the next closest station with available data, which is the Los Angeles-North Main Street station located at 1630 North Main Street approximately 18.4 miles southeast of the Project Site. **Error! Reference source not found.** indicates the number of days that the NAAQS and CAAQS have been exceeded at these stations in 2018, 2019, and 2020. The data indicates that the federal and State eight-hour ozone standards and State worst-hour ozone standard were exceeded each year from 2018 to 2020. In addition, the State PM_{10} standard and federal $PM_{2.5}$ standard were exceeded each year from 2018 to 2020. No other NAAQS or CAAQS were exceeded at the nearest monitoring stations.

Table 3 Ambient Air Quality at the Nearest Monitoring Stations

Pollutant	2018	2019	2020
Ozone (ppm), Eight-Hour Average[1]	0.101	0.094	0.115
Number of days of State exceedances (>0.070 ppm)	49	34	62
Number of days of federal exceedances (>0.070 ppm)	50	37	62
Ozone (ppm), Worst Hour[1]	0.120	0.122	0.142
Number of days of State exceedances (>0.09 ppm)	14	14	65
Nitrogen Dioxide (ppm), Worst Hour[1]	0.057	0.064	0.050
Number of days of State exceedances (>0.18 ppm)	0	0	0
Particulate Matter <10 microns ($\mu g/m^3$), Worst 24 Hours[2]	68.2	62.4	83.7
Number of days of State exceedances (>50 $\mu g/m^3$)	31	15	34
Number of days of federal exceedances (>150 $\mu g/m^3$)	0	0	0
Particulate Matter <2.5 microns ($\mu g/m^3$), Worst 24 Hours[3]	38.9	30.0	73.8
Number of days of federal exceedances (>35 $\mu g/m^3$)	1	0	3

[1] Data obtained from the Reseda station.

[2] Data obtained from the Los Angeles-North Main Street station

Source: CARB 2022b

Air Quality Management Plan

Under State law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which its jurisdiction is in non-compliance. The SCAQMD updates the plan every three years. Each iteration of the SCAQMD's Air Quality Management Plan (AQMP) is an update of the previous plan and has a 20-year horizon. The latest AQMP, the 2016 AQMP, was adopted on March 3, 2017. It incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2012 AQMP, including the approval of the new federal eight-hour ozone standard of 0.070 ppm that was finalized in 2015. The Final 2016 AQMP addresses several State and federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and meteorological air quality models. The Southern California Association of Governments' (SCAG) projections for socio-economic data (e.g., population, housing, employment by industry) and transportation activities from the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) are integrated into the 2016 AQMP.

The 2016 AQMP builds upon the approaches taken in the 2012 AQMP for the attainment of federal PM and ozone standards and highlights the significant amount of reductions to be achieved. It emphasizes the need for interagency planning to identify additional strategies to achieve reductions within the timeframes allowed under the federal Clean Air Act, especially in the area of mobile sources. The 2016 AQMP also includes a discussion of emerging issues and opportunities, such as fugitive toxic particulate emissions, zero-emission mobile source control strategies, and the interacting dynamics among climate, energy, and air pollution. The 2016 AQMP also demonstrates strategies for attainment of the new federal eight-hour ozone standard and vehicle miles travelled emissions offsets, pursuant to recent USEPA requirements (SCAQMD 2017).

Sensitive Receptors

Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with a margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children under 14; the elderly over 65; people engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases. Therefore, the majority of sensitive receptor locations are schools, hospitals, and residences. Sensitive receptors in the Project vicinity include single- and multi-family residences immediately to the east, south, and west; additional residences located approximately 130 feet to the north across Plummer Street; and Plummer Village Senior Community located approximately 215 feet east of the Project Site. In addition, the Proposed Project would include construction of an elementary school, which would add new sensitive receptors to the Project Site.

2.2 Impact Analysis

This air quality analysis conforms to the methodologies recommended in the SCAQMD's *CEQA Air Quality Handbook* (1993) and supplemental guidance provided by the SCAQMD, including recommended thresholds for emissions associated with both construction and operation of a project (SCAQMD 2019).

Methodology

The Project's construction and operational emissions were estimated using CalEEMod version 2020.4.0. CalEEMod uses Project-specific information, including the Project's land uses, square footages for different uses (e.g., elementary school, parking lot), and location, to estimate a Project's construction and operational emissions.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. Emissions were modeled assuming construction of a 34,755-sf elementary school (including 28 classrooms, administrative spaces, multi-purpose room) and a parking lot with 49 parking spaces. The start of construction (September 2023), construction schedule, and hauling assumptions were based on applicant provided information. In addition, as detailed in Section **Error! Reference source not found.**, ***Error! Reference source not found.***, it was assumed that Project construction would comply with all applicable regulatory standards, including SCAQMD Rule 403 (RCM-1 Fugitive Dust), SCAQMD Rule 402 (RCM-2 Odor Compliance), Section 2485 of Title 13 of the California Code of Regulations (RCM-3 Engine Idling), Section 93115 of Title 17 of the California Code of Regulations (RCM-4 Emission Standards), and Rule 1113 (RCM-5 Architectural Coatings).

Operational emissions modeled include mobile source emissions (i.e., vehicle emissions), energy emissions, and area source emissions. CalEEMod default values were used to estimate emissions from operational sources. Daily vehicle trips and VMT were sourced from the Transportation Assessment prepared by Linscott, Law, & Greenspan, Engineers (Linscott, Law, & Greenspan 2022). The trip generation rates in CalEEMod were adjusted to be consistent with Transportation Assessment's 1,232 vehicle trips per day and VMT per worker rate. Due to rounding, CalEEMod overestimates VMT by approximately 1,500, which is a conservative assumption. Emissions attributed to energy use include emissions from natural gas consumption for space and water heating and cooking. Area source emissions are generated by landscape maintenance equipment, consumer products, and architectural coatings.

Significance Thresholds

To determine whether a project would result in a significant impact to air quality, Appendix G of the *CEQA Guidelines* requires consideration of whether a project would:

1. Conflict with or obstruct implementation of the applicable air quality plan
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard
3. Expose sensitive receptors to substantial pollutant concentrations
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

Regional Significance Thresholds

The SCAQMD recommends quantitative regional significance thresholds for temporary construction activities and long-term project operation in the region of the SCAB overseen by SCAQMD, shown in Table 4.

Table 4 SCAQMD Regional Significance Thresholds

	Mass Daily Emissions Thresholds (pounds per day)	
Pollutant	**Construction**	**Operation**
VOC	75	55
NO_X	100	55
CO	550	550
SO_X	150	150
PM_{10}	150	150
$PM_{2.5}$	55	55

lbs/day = pounds per day; NO_x = nitrogen oxide; NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = particulate matter with a diameter no more than 10 microns; $PM_{2.5}$ = particulate matter with a diameter no more than 2.5 microns

Source: SCAQMD 2019

Localized Significance Thresholds

The SCAQMD has also developed Localized Significance Thresholds (LST) as a tool to assist lead agencies to analyze localized air quality impacts to sensitive receptors in the vicinity of a project. The SCAQMD's LST Methodology outlines how to analyze localized impacts from common pollutants of concern including NO_2, CO, PM_{10}, and $PM_{2.5}$ (SCAQMD 2008). Localized air quality impacts would occur if pollutant concentrations at sensitive receptors exceeded applicable NAAQS or CAAQS.

To minimize efforts, the SCAQMD developed mass rate lookup tables as a simple screening procedure. If a project's onsite emissions do not exceed the screening levels for any pollutant, it can be concluded that the project would not cause or contribute to an adverse localized air quality impact. Screening levels are provided for various distances between the project boundary and the nearest sensitive receptor and various project site acreages. Screening levels increase, as the project distance between the boundary and the nearest receiver increases. This is because air pollutant dispersion increases with distance. Screening levels increase, as the acreage increases. This is because the distance between construction sources and sensitive receptors increases with project acreage.

The LST mass rate lookup tables account for ambient pollutant concentrations based on the project's source receptor area (SRA). The LST mass rate lookup tables account for ambient pollutant concentrations based on a project's source receptor area (SRA). The LST methodology includes screening levels for 1-, 2-, and 5-acre sites at distances of 82 feet (25 meters), 164 feet (50 meters), 328 feet (100 meters), 656 feet (200 meters), and 1,640 feet (500 meters). Screening levels are more stringent for smaller sites which represent a more concentrated release.

LSTs have been developed for emissions generated by construction sites up to five acres in size. The Project Site is located in SRA 7 (East San Fernando Valley) and is approximately 2.06 acres in size. Pursuant to SCAQMD guidance, the two-acre LSTs were utilized for this analysis (SCAQMD 2008). The closest sensitive receptors to the Project Site are residences directly adjacent to the east, south and west. In addition, there are single-family residences located approximately 130 feet north of the Site across Plummer Street and Plummer Village Senior Community located approximately 215 feet east of the Site. According to the SCAQMD, projects with boundaries located closer than 82 feet to the nearest receptor should use the LSTs for receptors located at 82 feet (SCAQMD 2008). LSTs for construction on a two-acre site in SRA 7 for a receptor at 25 meters (82 feet) are shown in Table 5.

Table 5 SCAQMD LSTs for Construction

Pollutant	Allowable Emissions from a 2-acre Site in SRA 7 for a Receptor at 25 Meters (pounds/day)
Gradual conversion of NO_x to NO_2	63[1]
CO	786
PM_{10}	7
$PM_{2.5}$	3[2]

lbs/day = pounds per day; NO_x = nitrogen oxide; NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = particulate matter with a diameter no more than 10 microns; $PM_{2.5}$ = particulate matter with a diameter no more than 2.5 microns

[1]The screening criteria for NOx were developed based on the 1-hour NO_2 CAAQS of 0.18 ppm. Subsequently to publication of the SCAQMD's guidance the USEPA has promulgated a 1-hour NO_2 NAAQS of 0.100 ppm. This is based on a 98th percentile value, which is more stringent than the CAAQS. Because SCAQMD's LSTs have not been updated to address this new standard, to determine if project emissions would result in an exceedance of the 1-hour NO_2 NAAQS, an approximated LST was estimated to evaluate the federal 1-hour NO_2 standard. The revised LST threshold is calculated by scaling the NO_2 LST for by the ratio of 1-hour NO_2 standards (federal/State) (i.e., 114 lbs/day * (0.10/0.18) =63.3 lbs/day).

[2]The screening criteria for PM2.5 were developed based on an Annual CAAQS of 15 mg/m^3. Subsequently to publication of the SCAQMD's guidance the annual standard was reduced to 12 mg/m^3. Because SCAQMD's LSTs have not been updated to address this new standard, to determine if project emissions would result in an exceedance of the annual $PM_{2.5}$ CAAQS, an approximated LST was estimated. The revised LST threshold is calculated by scaling the $PM_{2.5}$ LST for by the ratio of 24-hour $PM_{2.5}$ standards (federal/State) (i.e., 4lb/day * (12/15) =3.2 lbs/day).

Source: SCAQMD 2009

Project Impacts

Threshold 1	Would the project conflict with or obstruct implementation of the applicable air quality plan? **NO IMPACT**

Impact AQ-1 THE PROJECT WOULD ADD NEW JOB OPPORTUNITIES TO THE CITY. HOWEVER, THE PROJECT WOULD NOT DIRECTLY INCREASE THE CITY'S POPULATION AS THE PROJECT DOES NOT PROPOSE NEW HOUSING AND IS INTENDED AS AN EDUCATIONAL USE. IN ADDITION, THE PROJECT WOULD NOT GENERATE EMISSIONS IN EXCESS OF SCAQMD THRESHOLDS. THEREFORE, THE PROJECT WOULD BE CONSISTENT WITH THE UNDERLYING ASSUMPTIONS OF THE EMISSIONS FORECASTS CONTAINED IN THE AQMP AND WOULD NOT CONFLICT WITH THE AQMP. NO IMPACT WOULD OCCUR.

A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. The 2016 AQMP relies on local general plans and the demographic forecasts contained in the SCAG 2016 RTP/SCS in its own projections for managing air quality in the SCAB. As such, projects that propose development that is consistent with the growth anticipated by SCAG's growth projections and/or the General Plan would not conflict with the SCAQMD AQMP. In the event that a project would propose development that is less dense than anticipated by the growth projections, the project would likewise be consistent with the AQMP.

The growth forecasts in SCAG's 2016 RTP/SCS estimate that the population of Los Angeles will be 4,609,400 in 2040, an increase of 763,900 people from a population of 3,845,500 in 2012 (SCAG 2016).[2] The Proposed Project would involve the development of an elementary school for an

[2] On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (2020 RTP/SCS), or Connect SoCal, which builds upon the progress made through implementation of the 2016 RTP/SCS and was developed through a four-year planning process to update population, housing and employment data as well as transportation strategies for the region through the horizon year of 2045.

additional enrollment of 172 students. However, the Proposed Project would not directly increase the City's population because no new housing is proposed, and the purpose of this facility is for educational use. Furthermore, as shown in Table 6 and Table 7 under Impact AQ-2, the Project would not generate criteria pollutant emissions in excess of SCAQMD thresholds for ozone precursors (VOC and NO_X) or $PM_{2.5}$. The Project would be consistent with the AQMP and would not conflict with or obstruct the applicable air quality plan. Therefore, no impacts would occur.

Threshold 2	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard? **LESS THAN SIGNIFICANT**

Impact AQ-2 CONSTRUCTION AND OPERATIONAL EMISSIONS FROM THE PROPOSED PROJECT WOULD NOT EXCEED SCAQMD REGIONAL THRESHOLDS OR LSTS, AS APPLICABLE. THEREFORE, THE PROPOSED PROJECT WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA POLLUTANT FOR WHICH THE SCAB REGION IS IN NON-ATTAINMENT UNDER NAAQS AND CAAQS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The City of Los Angeles is located in the SCAB, which is a non-attainment area for the NAAQS for ozone, $PM_{2.5}$, and lead as well as the CAAQS for ozone, PM_{10}, and $PM_{2.5}$. The Project does not include any stationary sources of lead emissions. Therefore, implementation of the Project would not result in substantial emissions of lead and this pollutant is not discussed further in this analysis. The below discussion assesses potential air quality impacts related to construction and operational emissions of criteria air pollutants for which the SCAB is in non-attainment, including ozone, PM_{10}, and $PM_{2.5}$.

Construction Impacts

Project construction would generate temporary air pollutant emissions associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction equipment and construction vehicles. In addition, construction equipment would release VOC emissions during the drying of architectural coating and paving phases. Table 6 summarizes the estimated maximum daily emissions of pollutants during project construction. As shown therein, construction-related emissions would not exceed SCAQMD thresholds. Therefore, project construction 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. Impacts would be less than significant.

However, SCAQMD has not updated the 2016 AQMP to incorporate these new demographic projections (the next update to the AQMP is expected to occur in 2022).

Table 6 Project Construction Emissions

	Maximum Emissions (lbs/day)					
Year	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
2023	6	58	56	<1	12	6
2024	9	49	54	<1	4	2
Maximum Daily Construction Emissions	**9**	**58**	**56**	**<1**	**12**	**6**
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day = pounds per day; VOC = Volatile organic compounds; NOX = nitrogen oxides; CO = carbon monoxide; SO_2 = sulfur dioxide; PM10 = particulate matter 10 microns in diameter or less; PM2.5 = particulate matter 2.5 microns or less in diameter.

Notes: All emissions modeling was completed using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from "mitigated" results, which account for compliance with RCMs. Emissions presented are the highest of the winter and summer modeled emissions. Maximum on-site emissions are the highest emissions that would occur on the Project site from on-site sources such as heavy construction equipment and architectural coatings and excludes off-site emissions from sources such as construction worker vehicle trips and haul truck trips.

Operational Impacts

Operation of the project would generate criteria air pollutant emissions associated with area sources (e.g., architectural coatings, consumer products, and landscaping equipment), energy sources (i.e., use of natural gas for space and water heating), and mobile sources (i.e., vehicle trips to and from the project site). Table 7 summarizes the project's maximum daily operational emissions by emission source. As shown therein, operational emissions would not exceed SCAQMD regional thresholds for criteria pollutants. Therefore, project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment, and impacts would be less than significant.

Table 7 Project Operational Emissions

	Maximum Daily Emissions (lbs/day)					
Emission Source	**VOC**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area	1	<1	<1	<1	<1	**<1**
Energy	<1	<1	<1	<1	<1	**<1**
Mobile	3	3	24	<1	5	1
Total Project Emissions	4	3	24	<1	5	1
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day = pounds per day; NO_x = nitrogen oxide; NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = particulate matter with a diameter no more than 10 microns; $PM_{2.5}$ = particulate matter with a diameter no more than 2.5 microns

Notes: All emissions modeling was completed using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from "mitigated" results that include compliance with RCMs. Emissions presented are the highest of the winter and summer modeled emissions.

Threshold 3	Would the project expose sensitive receptors to substantial pollutant concentrations? **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

Impact AQ-3 CONSTRUCTION OF THE PROPOSED PROJECT WOULD EXCEED THE SCAQMD'S LST THRESHOLDS. WITH THE IMPLEMENTATION OF TIER 4 FINAL CONSTRUCTION EQUIPMENT AND WATER EXPOSED AREA TWICE PER DAY, CONSTRUCTION EMISSIONS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. IN ADDITION, OPERATION OF THE PROPOSED PROJECT WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL CONCENTRATIONS OF CO OR TACS AND IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Sensitive Receptors

According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). Sensitive receptors in the Project vicinity include single- and multi-family residences immediately to the east, south, and west; additional residences located approximately 130 feet to the north across Plummer Street; and Plummer Village Senior Community located approximately 215 feet east of the Project Site. In addition, the Proposed Project would introduce new sensitive receptors to the project site. Localized air quality impacts to sensitive receptors typically result from CO hotspots, localized criteria air pollutant emissions, and TACs, which are discussed in the following subsections.

Localized Carbon Monoxide Hotspot Impact

A carbon monoxide hotspot is a localized concentration of carbon monoxide that is above a carbon monoxide ambient air quality standard. Localized carbon monoxide hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local carbon monoxide concentration exceeds the federal one-hour standard of 35.0 ppm or the federal and State eight-hour standard of 9.0 ppm (CARB 2016).

A detailed carbon monoxide analysis was conducted during the preparation of SCAQMD's 2003 AQMP. The locations selected for microscale modeling in the 2003 AQMP included high average daily traffic (ADT) intersections in the SCAB, those which would be expected to experience the highest CO concentrations. The highest CO concentration observed was at the intersection of Wilshire Boulevard and Veteran Avenue on the west side of Los Angeles near the I-405. The concentration of CO at this intersection was 4.6 ppm, which is well below the State and federal standards. The Wilshire Boulevard/Veteran Avenue intersection has an ADT of approximately 100,000 vehicles per day (SCAQMD 2003).

The total existing ADT for the nearest major intersection to the Project Area, Plummer Street and Sepulveda Boulevard, was estimated at 20,200 vehicles (City of Los Angeles 2018). Based on the Linscott, Law & Greenspan, Engineers' Transportation Assessment, the Project would generate approximately 1,232 daily trips. Operation of the Project would cause the ADT at this intersection to increase by up to 1,232 for a total of 21,432 daily trips. Both the existing and future ADT are below the 100,000-vehicle count on the Wilshire Boulevard/Veteran Avenue intersection, which was already below the CO standards. Project-generated local mobile-source CO emissions would not result in or substantially contribute to concentrations that exceed the one-hour or eight-hour CO standard. Therefore, impacts would be less than significant.

Localized Significance Thresholds

The *Final LST Methodology* was developed to be used as a tool to analyze localized impacts associated with project-specific level proposed projects. If the calculated emissions for the proposed construction or operational activities are below the LST emission levels found on the LST mass rate look-up tables (Appendix C of *Final LST Methodology;* SCAQMD 2009) and no potentially significant impacts are found to be associated with other environmental issues, then the proposed construction or operation activity is not significant for air quality. The Project analysis assumes main construction activity would occur immediately adjacent to single-family residences. The allowable emission for project utilizes the 82 feet receptor distance, and the project is in SRA 7(East San Fernando Valley). Table 8 summarizes the Project's maximum localized daily construction emissions from the Proposed Project. As shown therein, localized construction emissions would exceed SCAQMD LST thresholds for PM_{10} and $PM_{2.5}$. Therefore, Project construction would result in a potentially significant impact from localized criteria pollutant emissions.

Table 8 Unmitigated Project LST Construction Emissions

	Maximum Daily Emissions (lbs/day)					
Year	**VOC**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Maximum On-site Emissions	N/A	56	52	<1	11	6
SCAQMD LST	N/A	63	786	N/A	7	3
Threshold Exceeded?	**N/A**	**No**	**No**	**N/A**	**Yes**	**Yes**

lbs/day = pounds per day; VOC = volatile organic compounds; NO_x = nitrogen oxide; CO = carbon monoxide; PM_{10} = particulate matter with a diameter no more than 10 microns; $PM_{2.5}$ = particulate matter with a diameter no more than 2.5 microns; SO_x = sulfur oxide

Notes: Some numbers may not add up precisely due to rounding considerations. Maximum on-site emissions are the highest emissions that would occur on the project site from on-site sources, such as heavy construction equipment and architectural coatings, and excludes off-site emissions from sources such as construction worker vehicle trips and haul truck trips

Source: CalEEMod worksheets in Appendix A, see Table 3.2 – 3.6 "Overall Construction-mitigated" emissions. Highest of Summer and Winter emissions results are shown for all emissions. The mitigated emissions account for project sustainability features and/or compliance with specific regulatory standards.

Toxic Air Contaminants

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The following subsections discuss the Project's potential to result in impacts related to TAC emissions during construction and operation.

CONSTRUCTION

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2022a) and is therefore the focus of this analysis.

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the Proposed Project would occur over approximately 12 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of

exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time.

The Proposed Project would be consistent with the applicable AQMP requirements and control strategies intended to reduce emissions from construction equipment and activities. However, given the construction area's proximity to nearby sensitive receptors, impacts from TACs could be potentially significant.

OPERATION

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommended buffer distances between sensitive land uses and potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities). CARB recommends that local agencies avoid siting new, sensitive land uses within 500 feet of a freeway. In addition, the City of Los Angeles Planning Commission suggests that project applicants conduct a site-specific health risk assessment (HRA), improve indoor air quality with minimum efficiency reporting value (MERV)-Rated or high-efficiency particulate air (HEPA) filtration equipment, and further reduce exposure to TACs through various project design strategies. The project site is located approximately 440 feet east of I-405, a primary source of DPM with truck traffic traveling on the I-405 mainline. The Project would install MERV 13 filters, which remove approximately 90 percent of DPM from the intake air (Singer *et al*. 2016). Rincon prepared an operational HRA in August 2022, which evaluated the potential health risk to on-site receptors due to TAC emissions from nearby roadway sources (I-405). Results of the analysis were compared to SCAQMD thresholds for a cancer risk threshold of 10 in a million, and a Hazard Index significance threshold of 1.0. As shown in Table 9, the maximum exposed individual receptor and worker (MEIR/MEIW) would not exceed SCAQMD's cancer risk and hazard index thresholds (Rincon 2022).

Table 9 Health Risks Associated with Operational Activity

Scenario	Excess Cancer Risk (per million)	Chronic Hazard Risk[1]	Acute Hazard Risk
Maximally Exposed Individual Receptor (MEIR)	1.97	0.029	0.011
Maximum Exposed Individual Worker (MEIW)	0.212	0.029	0.011
SCAQMD Significance Threshold	>10	>1	<1
Threshold Exceeded?	No	No	No

µg/m^3 = micrograms per cubic meter; SCAQMD = South Coast Air Quality Management District.

[1]Noncancer health impacts are determined by dividing the airborne concentration at the receptor by the appropriate Reference Exposure Level (REL) for that substance. A REL is defined as the concentration at which no adverse noncancer health effects are anticipated. Because noncancer health impacts are assessed as the ratio of airborne concentration versus the REL, the resulting hazard index is unitless.

For HARP model outputs, refer to the Valor Elementary School Project Health Risk Assessment (Rincon 2022)

Educational land uses are not considered land uses that generate substantial TAC emissions based on review of the air toxic sources listed in SCAQMD's and CARB's guidelines. It is expected that

quantities of hazardous TACs generated on-site (e.g., cleaning solvents, paints, landscape pesticides, etc.) for the types of proposed land uses would be below thresholds warranting further study under the California Accidental Release Program. Because the Project would not include substantial TAC sources and is consistent with the CARB and SCAQMD guidelines, it would not result in the exposure of off-site sensitive receptors to significant amounts of carcinogenic or toxic air contaminants. Impacts would be less than significant.

As shown in Table 8, the Project's maximum localized daily construction emissions would exceed SCAQMD LST thresholds for PM_{10} and $PM_{2.5}$. Therefore, implementation of Mitigation Measure AQ-3 would be required to reduce impacts from localized criteria pollutant emissions and construction-related TAC emissions.

Mitigation Measure

AQ-3 Construction Emissions Reduction

Prior to issuance of grading permits, the City Engineer and the Chief Building Official shall confirm that the grading plan, building plans, and specifications stipulate that the following measures shall be implemented:

- All mobile off-road equipment (wheeled or tracked) greater than 50 horsepower used during construction activities shall meet the USEPA Tier 4 final standards Tier 4 certification can be for the original equipment or equipment that is retrofitted to meet the Tier 4 Final standards.
- A copy of the equipment's certification or model year specifications shall be available upon request for all equipment on-site.
- All unpaved demolition and construction areas shall be wetted at least twice times per day during excavation and construction.
- Electricity shall be supplied to the site from the existing power grid to support the electric construction equipment. If connection to the grid is determined to be infeasible for portions of the project, a non-diesel fueled generator shall be used.
- The project shall comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction.

Significance After Mitigation

With incorporation of Mitigation Measure AQ-3, the project would reduce PM_{10}, $PM_{2,5}$ and DPM emissions, as compared to CalEEMod assumption equipment emissions standards, depending on the specific horsepower rating of each piece of equipment. As shown in Table 10, with incorporation of Mitigation Measure AQ-3, criteria pollutant emissions would be below LST thresholds. Therefore, construction activities would not expose sensitive receptors to criteria pollutants and construction-related health impacts, including construction TAC emissions, would be less than significant with mitigation incorporated.

Table 10 Mitigated Project LST Construction Emissions

	Maximum Daily Emissions (lbs/day)					
Year	**VOC**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Maximum On-site Emissions	N/A	9	66	<1	4	2
SCAQMD LST	N/A	63	786	N/A	7	3
Threshold Exceeded?	**N/A**	**No**	**No**	**N/A**	**No**	**No**

lbs/day = pounds per day; VOC = volatile organic compounds; NO_x = nitrogen oxide; CO = carbon monoxide; PM_{10} = particulate matter with a diameter no more than 10 microns; $PM_{2.5}$ = particulate matter with a diameter no more than 2.5 microns; SO_x = sulfur oxide

Notes: Some numbers may not add up precisely due to rounding considerations. Maximum on-site emissions are the highest emissions that would occur on the project site from on-site sources, such as heavy construction equipment and architectural coatings, and excludes off-site emissions from sources such as construction worker vehicle trips and haul truck trips

Source: CalEEMod worksheets in Appendix A, see Table 3.2 – 3.6 "Overall Construction-mitigated" emissions. Highest of Summer and Winter emissions results are shown for all emissions. The mitigated emissions account for project sustainability features and/or compliance with specific regulatory standards.

Threshold 4 Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? **LESS THAN SIGNIFICANT**

Impact AQ-4 CONSTRUCTION AND OPERATION OF THE PROJECT WOULD NOT RESULT IN EMISSIONS LEADING TO ODORS THAT WOULD ADVERSELY AFFECT A SUBSTANTIAL NUMBER OF PEOPLE. THEREFORE, NO IMPACT WOULD OCCUR.

The Project would generate oil or diesel fuel odors during construction from equipment operations. These odors would be limited to the temporary construction period and would dissipate rapidly with distance. Impacts from construction activities would be less than significant.

With respect to odors generated by Project operation, the SCAQMD's CEQA Air Quality Handbook (1993) identifies land uses associated with odor complaints to be agricultural uses, wastewater treatment plants, chemical and food processing plants, composting, refineries, landfills, dairies, and fiberglass molding. Educational uses are not identified on this list. Furthermore, no odor-producing uses are located in the Project vicinity. In addition, the Project would be required to comply with SCAQMD Rule 402, which prohibits the discharge of air contaminants that would cause injury, detriment, nuisance, or annoyance to the public. Therefore, the Proposed Project would not generate objectionable odors affecting a substantial number of people. Impacts would be less than significant.

3 Greenhouse Gas Emissions

3.1 Background

This section analyzes GHG emissions associated with the Project and potential impacts related to climate change.

Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but "climate change" is preferred to "global warming" because it helps convey other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate changes continuously, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed substantial acceleration in the rate of warming during the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatonnes of anthropogenic CO_2 was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of CO_2, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (USEPA 2021). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature.

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6 (USEPA 2020).

Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally,

100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis (IPCC 2021).[3]

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 33 degrees Celsius (°C) cooler (World Meteorological Organization 2022). However, since 1750, estimated concentrations of CO_2, CH_4, and N_2O in the atmosphere have increased by 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity (Forster et al. 2007). GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

Greenhouse Gas Emissions Inventory

Worldwide anthropogenic emissions of GHGs were approximately 49,000 million metric tons (MMT, or gigatonne) CO_2e in 2010 (IPCC 2014). CO_2 emissions from fossil fuel combustion and industrial processes contributed about 65 percent of total emissions in 2010. Of anthropogenic GHGs, CO_2 was the most abundant, accounting for 76 percent of total 2010 emissions. Methane emissions accounted for 16 percent of the 2010 total, while N_2O and fluorinated gases accounted for 6 percent and 2 percent respectively (IPCC 2014).

Total United States (U.S.) GHG emissions were 6,558 MMT of CO_2e in 2019. Emissions decreased by 1.7 percent from 2018 to 2019; since 1990, total U.S. emissions have increased by an average annual rate of 0.06 percent for a total increase of 1.8 percent between 1990 and 2019. The decrease from 2018 to 2019 reflects the combined influences of several long-term trends, including population changes, economic growth, energy market shifts, technological changes such as improvements in energy efficiency, and decrease carbon intensity of energy fuel choices. In 2019, the industrial and transportation end-use sectors accounted for 30 percent and 29 percent, respectively, of nationwide GHG emissions while the commercial and residential end-use sectors accounted for 16 percent and 15 percent of nationwide GHG emissions, respectively, with electricity emissions distributed among the various sectors (USEPA 2021).

Based on the CARB's California Greenhouse Gas Inventory for 2000-2019, California produced 418.2 MMT of CO_2e in 2019 (CARB 2021). The major source of GHG emissions in California is transportation, contributing 41 percent of the State's total GHG emissions. The industrial sector is the second largest source, contributing 24 percent of the State's GHG emissions, while electric power accounts for approximately 14 percent (CARB 2021). The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. In 2016, the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMT of CO_2e (CARB 2021). The annual 2030 statewide target emissions level is 260 MMT of CO_2e (CARB 2017).

[3] The IPCC's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by CARB uses a GWP of 25 for methane, consistent with the IPCC's (2007) *Fourth Assessment Report*. Therefore, as the analysis is based on consistency with the 2017 Climate Change Scoping Plan, this analysis utilizes a GWP of 25 for methane.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past four decades has been warmer than all the previous decades in the instrumental record and the decade from 2011 through 2020 has been the warmest. The observed global mean surface temperature (GMST) for the decade from 2011 to 2020 was approximately 1.09°C (0.95°C to 1.20°C) higher than the average GMST over the period from 1850 to 1900. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, the latest IPCC report states that "human-induced climate change is already affecting many weather and climate extremes in every region across the globe" (IPCC 2021). These climate change impacts include climate change sea level rise, increased weather extremes, and substantial ice loss in the Arctic over the past three decades.

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 0.6 to 1.1°C higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2019). In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the State and regionally specific climate change case studies (State of California 2018). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. Below is a summary of some of the potential effects that could be experienced in California as a result of climate change.

Air Quality

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century (State of California 2019). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the State has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (State of California 2019). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the State. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains could tend to temporarily clear the air of particulate pollution, which would effectively reduce the number of large wildfires and thereby ameliorate the pollution associated with them (California Natural Resources Agency 2009).

In the Greater Los Angeles region, changes in meteorological conditions under climate change will affect future air quality. Regional stagnation conditions may occur more often in the future, which would increase pollutant concentrations (State of California 2019). Hotter future temperatures will

act to increase surface ozone concentrations both due to chemistry producing more ozone and higher rates of biogenic emissions, while increases of water vapor also influence chemistry by increasing ozone production in already polluted areas. Changes in ozone may increase in the future however, changes in particulate matter are less certain. Projected changes by 2050 are generally not statistically significant (State of California 2019).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. However, the average early spring snowpack in the western United States, including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 5.9 inches along the central and southern California coast (State of California 2019). The Sierra snowpack provides the majority of California's water supply by accumulating snow during the State's wet winters and releasing it slowly during the State's dry springs and summers. A warmer climate is predicted to reduce the fraction of precipitation falling as snow and result in less snowfall at lower elevations, thereby reducing the total snowpack (California Department of Water Resources 2018; State of California 2019). The State of California projects that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2019).

Similar to the rest of the State, the Greater Los Angeles region is expected to face a challenging combination of decreased water supply and increased water demand (State of California 2019). Greater interannual variability of rainfall and sharp decreases in snowpack will create surface water limitations for the region. Although the effect of climate change on average precipitation in the region is still unclear, more frequent occurrences of extreme events such as the 2011-2016 drought could substantially decrease groundwater recharge, which is essential for the sustainability of agriculture in the region since the vast majority of water used in agriculture in the region is groundwater from local wells. Furthermore, higher temperatures mean that dry years will more quickly develop into severe drought conditions.

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding (State of California 2019). Furthermore, climate change could induce substantial sea level rise in the coming century. Rising sea level increases the likelihood of and risk from flooding. The rate of increase of global mean sea levels between 1993 to 2020, observed by satellites, is approximately 3.3 millimeters per year, double the twentieth century trend of 1.6 millimeters per year [World Meteorological Organization 2013; National Aeronautics and Space Administration (NASA) 2022]. Global mean sea levels in 2013 were about 0.23 meter higher than those of 1880 (NASA 2022). Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea level rise

of 11 to 21.5 inches by 2100 under the lowest emissions scenario and a rise of 25 to 40 inches by 2100 under the very high emissions scenario (IPCC 2021).

A rise in sea levels could erode 31 to 67 percent of southern California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. This would also jeopardize California's water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2019). Furthermore, increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

As discussed above, climate change could potentially affect the amount of snowfall, rainfall, and snowpack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for saltwater intrusion. In the Greater Los Angeles region, despite small changes in average precipitation, dry and wet extremes are both expected to increase (State of California 2019). By the late 21st century, the wettest day of the year is expected to increase across most of the region. Increased frequency and severity of atmospheric river events are also projected to occur for this region.

Agriculture

California has a roughly $49 billion annual agricultural industry that produces nearly a third of the country's vegetables and over half of the country's fruits and nuts (California Department of Food and Agriculture 2022). Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2019). Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems and Wildlife

Climate change and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists project that the annual average maximum daily temperatures in California could rise by 4.4 to 5.8°F in the next 50 years and by 5.6 to 8.8°F in the next century (State of California 2019). Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals related to: (1) timing of ecological events; (2) geographic distribution and range; (3) species' composition and the incidence of nonnative species within communities; and (4) ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2019). Increases in wildfire would further remove sensitive habitat; increased severity in droughts would potentially starve plants and animals of water; and sea level rise will affect sensitive coastal ecosystems.

Regulatory Setting

The following regulations address both climate change and GHG emissions.

Federal Regulations

FEDERAL CLEAN AIR ACT

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al*. ([2007] 549 U.S. 497) held that the USEPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that establishes the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the U.S. Supreme Court held the USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

SAFER AFFORDABLE FUEL-EFFICIENT VEHICLES RULE

In August 2018, the USEPA and the National Highway Traffic Safety Administration (NHTSA) issued a proposed ruling to roll back some of the fuel economy and GHG standards for medium- and heavy-duty trucks. The new ruling proposed by the USEPA and NHTSA, the Safer Affordable Fuel-Efficient (SAFE) Vehicle Rules, would replace the Corporate Average Fuel Economy (CAFE) standards set for model year 2022-2025 passenger car and light trucks, while the 2021 model year vehicles will maintain the CAFE standards. The ruling is split into two parts.

Part One, “One National Program” (84 Federal Register 51310), revokes a waiver granted by USEPA to the State of California under Section 209 of the federal Clean Air Act to enforce more stringent emission standards for motor vehicles than those required by USEPA for the explicit purpose of GHG emissions reduction, and indirectly, criteria air pollutants and ozone precursor emissions reduction. This revocation became effective on November 26, 2019, potentially restricting the ability of CARB to enforce more stringent GHG emission standards for new vehicles and set zero emission vehicle mandates in California.

Part Two addresses CAFE standards for passenger cars and light trucks for model years 2021 to 2026. This rulemaking proposes new CAFE standards for model years 2022 through 2026 and would amend existing CAFE standards for model year 2021. The proposal would retain the model year 2020 standards (specifically, the footprint target curves for passenger cars and light trucks) through model year 2026. The proposal addressing CAFE standards was jointly developed by NHTSA and USEPA, with USEPA simultaneously proposing tailpipe carbon dioxide standards for the same vehicles covered by the same model years.

California Regulations

CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. California has numerous regulations aimed at reducing the State's GHG emissions. These initiatives are summarized below.

CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006 (ASSEMBLY BILL 32 AND SENATE BILL 32)

The "California Global Warming Solutions Act of 2006," Assembly Bill (AB) 32, outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHG emissions to meet the 2020 target. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT of CO_2e. On December 11, 2008, CARB approved the Climate Change Scoping Plan, which included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other sectors (CARB 2008). Many of the GHG emission reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard and Cap-and-Trade) have been adopted since the plan's approval.

CARB approved the 2013 Scoping Plan Update in May 2014. The update defined CARB's climate change priorities for the next five years and set the groundwork to reach post-2020 statewide goals. The update highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 (detailed below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of six metric tons (MT) of CO_2e by 2030 and two MT of CO_2e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the State (CARB 2017).

SENATE BILL 375

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO's Regional Transportation Plan. Qualified projects consistent with an approved SCS or Alternative Planning

Strategy (categorized as "transit priority projects") would receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. SCAG was assigned targets of an 8 percent reduction in GHGs from transportation sources by 2020 and a 19 percent reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of sub regional plans by the sub regional councils of governments and the county transportation commissions to meet SB 375 requirements.

SENATE BILL 1383

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery (CalRecycle) in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

SENATE BILL 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 44 percent by 2024, 60 percent by 2030, and 100 percent by 2045.

EXECUTIVE ORDER B-55-18

On September 10, 2018, the governor issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

CALIFORNIA BUILDING STANDARDS CODE

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 CBC). The 2016 CALGreen institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. It also includes voluntary tiers (I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

The mandatory standards require:

- 20 percent reduction in indoor water use relative to specified baseline levels;
- 50 percent construction/demolition waste diverted from landfills;
- Inspections of energy systems to ensure optimal working efficiency;
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards;
- Dedicated circuitry to facilitate installation of electric vehicle (EV) charging stations; and
- Installation of EV charging stations.

The voluntary standards require:

- **Tier I:** 15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content for building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof; and
- **Tier II:** 30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content for building materials, 30 percent permeable paving, 30 percent cement reduction, and cool/solar reflective roof.

Similar to the compliance reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water-reduction requirements must be demonstrated through completion of water use reporting forms for new non-residential buildings. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.

Regional and Local Regulations

2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

On May 7, 2020, SCAG's Regional Council adopted the 2020-2045 RTP/SCS (titled Connect SoCal) for federal transportation conformity purposes and considered approval of the full plan and for all other purposes within 120 days of this date. Following initial adoption, SCAG formally adopted the 2020-2045 RTP/SCS on September 3, 2020 to provide a roadmap for sensible ways to expand transportation options, improve air quality and bolster Southern California's long-term economic viability. The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes ten goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center-focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020).

Green LA/Climate LA Plans

The City of Los Angeles adopted *Green LA: An Action Plan to Lead the Nation in Fighting Global Warming* (Green LA), in May 2007. Green LA set the goal of reducing the City's greenhouse gas

emissions to 35 percent below 1990 levels by 2030. The emphasis of Green LA is on municipal facilities and operations followed by programs to reduce emissions in the community. To facilitate implementation of Green LA, the City adopted the Los Angeles Green Building Code. In addition, the Los Angeles Department of Water and Power (LADWP) will continue to implement programs to emphasize water conservation and will also pursue securing alternative water supplies, including recycled water and storm water capture. Furthermore, the City implemented the Recovering Energy, Natural Resources and Economic Benefit from Waste for Los Angeles (RENEW LA) plan to meet solid waste reduction goals by expanding recycling to multifamily dwellings, commercial establishments, and restaurants (City of Los Angeles 2005). Under the RENEW LA plan, the City is also developing facilities that will convert solid waste to energy without incineration. These measures would serve to reduce overall emissions from the City. Green LA is being implemented through Climate LA, which provides detailed information about each action item discussed in the Green LA framework. Action items range from harnessing wind power for electricity production and energy efficiency retrofits in City buildings to converting the City's fleet vehicles to cleaner and more efficient models and reducing water consumption.

CITY OF LOS ANGELES SUSTAINABLE CITY PLAN AND GREEN NEW DEAL

On April 8, 2015, Los Angeles released the Sustainable City pLAn, which covers a multitude of environmental, social, and economic sustainability issues related to GHG emission reduction either specifically or by association. Actionable goals include increasing the green building standard for new construction, creating a benchmarking policy for building energy use, developing "blue, green, and black" waste bin infrastructure, reducing water use by 20 percent, and possibly requiring LEED Silver or better certification for new construction. In 2019, the City of Los Angeles prepared the 2019 Green New Deal, which provided an expanded vision of the pLAn, focusing on securing clean air and water and a stable climate, improving community resilience, expanding access to healthy food and open space, and promoting environmental justice for all. Through the Green New Deal, the City would reduce an additional 30 percent in GHG emissions above and beyond the 2015 pLAn and ensure that the City stays within its carbon budget between 2020 and 2050 (City of Los Angeles 2022).

CITY OF LOS ANGELES GREEN BUILDING CODE

Per Ordinance 186,488, the Los Angeles City Council amended Chapter IX, Article 9 of the LAMC to incorporate by reference the 2019 California Green Building Standards (CALGreen) Code with certain changes and modifications. Mandatory requirements and elective measures are provided for three categories: (1) low-rise residential buildings; (2) non-residential and high-rise residential buildings; and (3) additions and alterations to non-residential and high-rise residential buildings. Specific requirements under the Los Angeles Green Building Code for new non-residential projects include:

- 30 percent of the total number of parking spaces must be EV spaces.
- For new non-residential buildings, 10 percent of the total number of parking spaces must be equipped with EV charging stations.
- Provide permanently anchored bicycle racks conveniently accessed with a minimum of four two-bike capacity racks per new building.
- Provide permanent, secure bicycle parking conveniently accessed with a minimum of two staff bicycle parking spaces per new building. Acceptable bicycle parking facilities shall be convenient from the street or staff parking area and shall meet one of the following:

- Covered, lockable enclosures with permanently anchored racks for bicycles.
- Lockable bicycle rooms with permanently anchored racks.
- Lockable, permanently anchored bicycle lockers.

- Minimum standards for three-year aged solar reflectance, thermal emittance, and Solar Reflectance Index values for roofs must be met.

CITY OF LOS ANGELES GENERAL PLAN

The City of Los Angeles General Plan does not have a specific element aimed at reducing GHG emissions and does not include any goals, objectives, or policies specific to reducing GHG emissions. However, five goals and their respective objectives from the Air Quality Element of the General Plan would also serve to reduce GHG emissions (City of Los Angeles 1992):

Goal 2: Less reliance on single-occupancy vehicle from fewer commute and non-work trips

Objective 2.1: Reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals

Goal 3: Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand-management techniques

Objective 3.2: Reduce vehicular traffic during peak periods

Goal 4: Minimal impacts of existing land use pattern and future land use development on air quality by addressing the relationship between land use, transportation, and air quality

Objective 4.2: Reduce vehicle trips and VMT associated with land use patterns.

Goal 5: Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels, and the implementation of conservation measures, including passive measures, such as site orientation and tree planting

Objective 5.1: Increase energy efficiency of City facilities and private developments

Objective 5.2: Have a portion of the City's service fleet be comprised of alternative fuel powered vehicles, subject to availability of funding and practical feasibility

Objective 5.3: Reduce the use of polluting fuels in stationary sources

Goal 6: Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution

Objective 6.1: Make air quality education and citizen participation a priority in the City's effort to achieve clean air standards

3.2 Impact Analysis

Significance Thresholds

The majority of individual projects do not generate sufficient GHG emissions to create significant project-specific environment effects. However, the environmental effects of a project's GHG emissions can contribute incrementally to cumulative environmental effects that are significant, contributing to climate change, even if an individual project's environmental effects are limited (CEQA Guidelines Section 15064[h][1]). The issue of a project's environmental effects and contribution towards climate change typically involves an analysis of whether or not a project's

contribution towards climate change is cumulatively considerable. 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 (CEQA Guidelines Section 15064[h][1]).

CEQA Guidelines Section 15064.4 recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions; whether a project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines Section 15064.4 does not establish a threshold of significance. 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, as long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7[c]). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines Section 15130[f]). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem in the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of GHG emissions." Therefore, a lead agency can make a finding of less-than-significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The City has not adopted a numerical significance threshold for assessing impacts related to GHG emissions and has not formally adopted a local plan for reducing GHG emissions. Neither the SCAQMD, the California Office of Planning and Research, CARB, CAPCOA, or any other state or relevant regional agency has adopted a numerical significance threshold for assessing GHG emissions that is applicable to the Project. Therefore, in recent environmental impact reports certified by the City of Los Angeles, the City has evaluated the significance of projects' potential impacts with regard to GHG emissions and climate change solely on consistency with plans and polices adopted for the purposes of reducing GHG emissions and mitigating the effects of climate change. The City has also quantified the project's GHG emissions for informational purposes but does not compare the quantified GHG emissions to a numeric threshold (City of Los Angeles 2021a, 2021b, and 2021c).

In the absence of any adopted numeric threshold, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a

statewide, regional, or local plan for the reduction or mitigation of GHG emissions. For this Project, the most directly applicable adopted regulatory plans to reduce GHG emissions are the 2017 Scoping Plan, the 2020-2045 RTP/SCS, the City's LA Green Plan, and the Sustainable City pLAn/Green New Deal.

Methodology

Consistency with Applicable Plans and Policies

As discussed under Section 3.2, *Significance Thresholds,* recent environmental impact reports certified by the City of Los Angeles evaluated Project impacts related to GHG emissions based solely on consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. Therefore, for purposes of this Project, an evaluation of consistency with such plans is the sole basis for determining the significance of the Project's GHG-related impacts on the environment. Accordingly, a consistency analysis has been provided that describes the Project's consistency with applicable plans and policies adopted for the purpose of reducing GHG emissions. These plans include the applicable portions of the 2017 Scoping Plan, the 2016–2040 RTP/SCS, the LA Green Plan/Climate LA, and the Sustainable City pLAn/Green New Deal.

As noted in CEQA Guidelines Section 15064.4(b)(3), consistency with such plans and policies "must reduce or mitigate the Project's incremental contribution of greenhouse gas emissions." Therefore, for informational purposes regarding such incremental reductions, this section also estimates reductions of Project-related GHG emissions resulting from consistency with applicable plans. Quantification of the reduction in emissions associated with compliance with applicable plans and policies is used to demonstrate the efficacy of measures contained in the 2017 Scoping Plan, the RTP/SCS, and City GHG reduction plans, but the City has not adopted any specific numeric threshold pertaining to the level of emissions reduction achieved through compliance with applicable plans and policies.[4]

GHG Emission Quantification

Calculations of CO_2, CH_4, and N_2O emissions are provided to estimate the Proposed Project's potential GHG emissions. Calculations are based on the methodologies discussed in the CAPCOA (2008) *CEQA and Climate Change* white paper and guidance from CARB. GHG emissions associated with the Proposed Project were calculated using CalEEMod version 2020.4.0 (see Appendix A for CalEEMod results).

CONSTRUCTION EMISSIONS

Construction emissions were modeled in accordance with the methodology outlined in *Methodology* under Section 2.2, *Impact Analysis*. Complete results from CalEEMod and assumptions can be viewed in Appendix A. In accordance with SCAQMD's recommendation, GHG emissions from construction of the Proposed Project were amortized over a 30-year period and added to annual operational emissions to determine the Project's total annual GHG emissions.

[4] The comparison to a so-called "business as usual" scenario is not used as a threshold of significance but is used to provide information and a quantitative metric to measure the project's GHG emissions and level of reductions from project features and other characteristics. See *Center for Biological Diversity v. California Department of Fish and Wildlife* (2015) 62 Cal.4th 204.

ENERGY EMISSIONS

Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CAPCOA 2021). The Project would be served by LADWP. Therefore, LADWP's specific energy intensity factors (i.e., the amount of CO_2, CH_4, and N_2O per kilowatt-hour) are used in the calculations of GHG emissions. In California, Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Energy usage from the proposed residences account for the requirements of the 2019 Title 24 building energy efficiency standards.

AREA SOURCE EMISSIONS

GHG emissions from area sources would be generated by the use of landscaping equipment and fireplaces. In accordance with SCAQMD Rule 445, the Proposed Project would not include wood-burning devices.

SOLID WASTE EMISSIONS

The disposal of solid waste produces GHG emissions from the transportation of waste, anaerobic decomposition in landfills, and incineration. According to a CalRecycle report to the Legislature, as of 2013 California had achieved a statewide 50 percent diversion of solid waste from landfills through "reduce/recycle/compost" programs (CalRecycle 2015). However, the City of Los Angeles has achieved a solid waste diversion rate of 76 percent (Los Angeles Bureau of Sanitation 2013). Therefore, the CalEEMod input was adjusted to account for the City's solid waste diversion rate.

WATER AND WASTEWATER EMISSIONS

The amount of water used and the amount of wastewater generated by a project generate indirect GHG emissions. These emissions are a result of the energy used to supply, convey, and treat water and wastewater. In addition to the indirect GHG emissions associated with energy use, the wastewater treatment process itself can directly emit both CH_4 and N_2O.

The indoor and outdoor water use consumption data for each land use subtype comes from the Pacific Institute's *Waste Not, Want Not: The Potential for Urban Water Conservation in California* (2003).[5] Based on that report, a percentage of total water consumption was dedicated to landscape irrigation, which is used to determine outdoor water use. Wastewater generation was similarly based on a reported percentage of total indoor water use. New development would be subject to CALGreen, which requires a 20 percent increase in indoor water use efficiency.

MOBILE SOURCE EMISSIONS

Mobile source emissions consist of emissions generated by residents and visitors to and from the Project Site. Mobile emission estimates are based on Linscott, Law, & Greenspan, Engineers' Transportation Assessment daily vehicle trips and VMT per worker.

[5] California Emissions Estimator Model, User Guide, Appendix D. Available at: http://www.caleemod.com/

Impact Analysis

Threshold 1	Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? **LESS THAN SIGNIFICANT**
Threshold 2	Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs? **LESS THAN SIGNIFICANT**

Impact GHG-1 THE PROJECT WOULD BE CONSISTENT WITH THE APPLICABLE STATEWIDE PLANS AND POLICIES AND THE 2020-2045 RTP/SCS, GREEN LA PLAN, AND SUSTAINABLE CITY PLAN/GREEN NEW DEAL. CONSTRUCTION AND OPERATION OF THE PROJECT ALSO WOULD NOT GENERATE GHG EMISSIONS THAT WOULD HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT, AND PROJECT IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Consistency with Applicable Plans and Policies

SENATE BILL 32 AND 2017 SCOPING PLAN

There are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall State plan is SB 32, the follow up to AB 32, the California Global Warming Solutions Act of 2006. The goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. CARB's 2017 Scoping Plan, which outlines a framework to achieve SB 32's 2030 target, emphasizes innovation, adoption of existing technology, and strategic investment to support its strategies for GHG emissions reductions. Statewide plans and regulations in support of these strategies, such as GHG emissions standards for vehicles (AB 1493), the Low Carbon Fuel Standard, and regulations requiring an increasing fraction of electricity to be generated from renewable sources, are being implemented at the statewide level; as such, compliance at a project-level would occur as implementation continues statewide. Therefore, the Project would be consistent with SB 32 and the 2017 Scoping Plan.

2020-2045 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

The SCAG's 2020-2045 RTP/SCS is forecast to help California reach its GHG reduction goals. According to the 2020-2045 RTP/SCS, the updated target for the SCAG region is 19 percent below 2005 per capita emissions levels by 2035. The revised 2035 target is higher than the previous CARB target of 13 percent for the SCAG region. The 2020-2045 RTP/SCS includes implementation strategies for focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, supporting implementation of sustainability policies, and promoting a green region. The Project's consistency with the 2020-2045 RTP/SCS is discussed in Table 11. As shown therein, the Proposed Project would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS.

Table 11 Project Consistency with Applicable SCAG RTP/SCS GHG Emission Reduction Strategies

Strategy/Action	Project Consistency
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 reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations) ▪ Identify ways to "right size" parking requirements and promote alternative parking strategies (e.g., shared parking or smart parking)	**Consistent.** The Proposed Project is an infill development that would involve construction of a new public elementary school. The Proposed Project would be within walking and biking distance of existing residential and commercial uses and would include 115 bicycle parking spaces for students and staff. In addition, the Project is within 0.5-mile of bus stops for Metro bus routes 166, 167, and 234. These features would incentivize the use of public transit and active transportation for traveling to and from the Site. Therefore, the Proposed Project would focus growth near destinations and mobility options.
Leverage Technology Innovations. ▪ Promote low emission technologies such as neighborhood electric vehicles, 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	**Consistent.** Related to energy production and usage, the Project would be required to equip 10 percent of the total number of on-site parking spaces with EV charging stations and designate 30 percent of parking spaces as EV spaces, in accordance with LAMC Sections 99.05.106.5.3.3 and 99.05.106.5.3.6. Of the required parking spaces for the Project, at least 10 percent () would be equipped with EV charging stations (i.e., 7 spaces) and at least 30 percent would be designated EV/clean air vehicles spaces (i.e., 9 spaces).

Strategy/Action	Project Consistency
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 (EIFDs), Community Revitalization and Investment Authorities (CRIAs), 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 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 decision makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy	**Consistent.** The Project would be designed and operated to meet the applicable requirements of CALGreen and the City's Green Building Code. The Project's indoor water use would be minimized by 20 percent. Furthermore, energy use would be reduced by implementing the requirements of 2019 Title 24 standards, including energy-efficient lighting and appliances. Therefore, the Project would support implementation of sustainability policies.
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	**Consistent**. The Project is an infill development that would involve construction of a new public elementary school. Because the project is an infill development, it would not interfere with regional wildlife connectivity or convert agricultural land. The Project would comply with Sustainable City pLAn, Green New Deal, Title 24, and CALGreen. Therefore, the Project would support development of a green region.

Source: SCAG 2020

GREEN LA AND SUSTAINABLE CITY PLAN/GREEN NEW DEAL

Table 12 and Table 13 summarize the Project's consistency with the Green LA and Sustainable City pLAn, respectively. As discussed therein, the Project would be consistent with the actions and measures contained in these local GHG reduction plans.

Table 12 Project Consistency with Applicable Green LA Actions

Action	Project Consistency
Energy	
Present a comprehensive set of green building policies to guide and support private sector development.	**Consistent.** The Project would be designed and operated to meet the applicable requirements of CALGreen and the City's Green Building Code.
Water	
Meet all additional demand for water resulting from growth through water conservation and recycling. Reduce per capita water consumption by 20 percent	**Consistent.** While this action primarily applies to the City and LADWP, the Project would incorporate water conservation features, such as low-flow fixtures, required pursuant to the 2019 California Plumbing Code, 2019 CALGreen, 2020 Los Angeles Plumbing Code, and 2020 Los Angeles Green Building Code. Furthermore, the 2019 CALGreen requirements require a 20 percent increase in indoor water use efficiency relative to previous building code requirements.
Transportation	
Promote walking and biking to work, within neighborhoods, and to large events and venues.	**Consistent.** The Project Site is located approximately 55 feet east of the Plummer/Orion bus stop for Metro Bus Line 167 and approximately 820 feet west of the Sepulveda/Plummer bus stop for Metro Bus Line 234. The Proposed Project would be within walking and biking distance of existing residential and commercial uses and would include 115 bicycle parking spaces for students and staff. Therefore, the Project would promote walking and biking to work and within the local neighborhood.
Waste	
Recycle 70 percent of trash by 2015.	**Consistent.** The City of Los Angeles has achieved a landfill diversion rate of 76 percent (Los Angeles Sanitation and Environment 2022). The Project would be subject to the requirements of the statewide commercial recycling program, which established a statewide goal of diverting at least 75 percent of solid waste from landfills by 2020. Compliance with existing City and State programs would achieve consistency with this measure.

Source: City of Los Angeles 2007

Table 13 Project Consistency with Applicable Sustainable City pLAn/Green New Deal Measures

Action	Project Consistency
Renewable Energy ▪ LADWP will supply 55% renewable energy by 2025; 80% by 2036; and 100% by 2045. ▪ Increase cumulative megawatts by 2025; 2035; and 2050 of: ▫ Local solar to 900-1,500 MW; 1,500-1,800 MW; and 1,950 MW. ▫ Energy storage capacity to 1,654-1,750 MW; 3,000 MW; and 4,000 MW. ▫ Demand response (DR) programs to 234 MW (2025) and 600 MW (2035).	**Consistent.** While this action primarily applies to the City and LADWP, LADWP is required to generate electricity that would increase renewable energy resources to 44 percent by 2024, 60 percent by 2030, and 100 percent by 2045 under SB 100. Because LADWP would provide electricity service to the Project Site, the Project would use electricity consistent with the requirements of SB 100 and City goals.

Action	Project Consistency
Local Water ▪ Source 70% of L.A.'s water locally and capture 150,000 acre-feet per year of stormwater by 2035. ▪ Recycle 100% of all wastewater for beneficial reuse by 2035. ▪ Build at least 10 new multi-benefit stormwater capture projects by 2025; 100 by 2035; and 200 by 2050. ▪ Reduce potable water use per capita by 22.5% by 2025; and 25% by 2035; and maintain or reduce 2035 per capita water use through 2050 ▪ Install or refurbish hydration stations at 200 sites, prioritizing municipally-owned buildings and public properties such as parks, by 2035.	**Consistent.** While this action primarily applies to the City and LADWP, the Project would incorporate water conservation features to reduce water use. The Project would be required to comply with the City's water use restrictions on timing, area, frequency, and duration of specified allowable water usage. The Project would also be required to comply with the Title 24 standards for Water Efficiency and Conservation that are in effect at the time of development. These standards include actions such as separate water submeters for subsystems, prescriptive reduced flow rates for water and fixtures, wall-mounted urinals, and plumbing fixtures and fittings.
Clean and Healthy Buildings ▪ All new buildings will be net zero carbon by 2030; and 100% of buildings will be net zero carbon by 2050. ▪ Reduce building energy use per sf for all building types 22% by 2025; 34% by 2035; and 44% by 2050.	**Consistent.** The Project would be constructed in accordance with the applicable requirements of CALGreen and the City's Green Building Code.
Mobility & Public Transit ▪ Increase the percentage of all trips made by walking, biking, micro-mobility/matched rides or transit to at least 35% by 2025; 50% by 2035; and maintain at least 50% by 2050. ▪ Reduce vehicle miles traveled per capita by at least 13% by 2025; 39% by 2035; and 45% by 2050. ▪ Ensure Los Angeles is prepared for Autonomous Vehicles (AV) by the 2028 Olympic and Paralympic Games.	**Consistent.** The Proposed Project is an infill development that is located approximately 55 feet east of the Plummer/Orion bus stop for Metro Bus Line 167 and approximately 820 feet west of the Sepulveda/Plummer bus stop for Metro Bus Line 234. The Project would be within walking and biking distance of existing residential and commercial uses and would include 115 bicycle parking spaces for students and staff. Therefore, the Project would support increasing the percentage of trips made by walking, biking, and transit as well as the reduction of per capita VMT.
Zero Emissions Vehicles ▪ Increase the percentage of electric and zero emission vehicles in the city to 25% by 2025; 80% by 2035; and 100% by 2050. ▪ Electrify 100% of LA Metro and LADOT buses by 2030. ▪ Reduce port-related GHG emissions by 80% by 2050.	**Consistent.** In accordance with LAMC Sections 99.05.106.5.3.3 and 99.05.106.5.3.6, the Project would equip at least 10 percent of the required on-site parking spaces with EV charging stations and designate at least 30 percent of parking spaces as EV/clean air vehicle spaces.
Waste and Resource Recovery ▪ Increase landfill diversion rate to 90% by 2025; 95% by 2035; and 100% by 2050 ▪ Reduce municipal solid waste generation per capita by at least 15% by 2030, including phasing out single-use plastics by 2028 ▪ Eliminate organic waste going to landfill by 2028 Increase proportion of waste products and recyclables productively reused and/or repurposed within Los Angeles County to at least 25% by 2025; and 50% by 2035.	**Consistent.** The City of Los Angeles has achieved a landfill diversion rate of 76 percent (Los Angeles Sanitation and Environment 2022). The Project would be subject to the requirements of the statewide commercial recycling program, which establishes a statewide goal of diverting at least 75 percent of solid waste from landfills by 2020. Compliance with existing City and State programs would achieve consistency with this measure.

Action	Project Consistency
Urban Ecosystems and Resilience ▪ Increase tree canopy in areas of greatest need by at least 50% by 2028. ▪ Complete or initiate restoration identified in the 'ARBOR' Plan by 2035. ▪ Create a fully connected LARiverWay public access system that includes 32 miles of bike paths and trails by 2028. ▪ Reduce urban/rural temperature differential by at least 1.7 degrees by 2025; and 3 degrees by 2035. ▪ Ensure proportion of Angelenos living within 1/2 mile of a park or open space is at least 65% by 2025; 75% by 2035; and 100% by 2050. ▪ Achieve and maintain 'no-net-loss' of native biodiversity by 2035.	**Consistent.** The Project would be an infill development in an urbanized area and thus would not adversely impact native biodiversity.

Source: City of Los Angeles 2020

CONCLUSION

In summary, the plan consistency analysis provided above demonstrates that the Project complies with or exceeds the requirements of policies, regulations and GHG reduction actions/strategies outlined in the 2017 Scoping Plan, the 2020–2045 RTP/SCS, the LA Green Plan, and the Sustainable City pLAn/Green New Deal. Consistency with the above plans, policies, regulations and GHG reduction actions/strategies would reduce the Project's incremental contribution of GHG emissions to a less than significant level.

GHG Emissions Quantification

CONSTRUCTION EMISSIONS

The SCAQMD has recommended amortizing construction-related emissions over a 30-year period in conjunction with the Proposed Project's operational emissions. As shown in Table 14, construction of the Project would generate an estimated 1,208 MT CO_2e, or 40 MT CO_2e year when amortized over a 30-year period.

Table 14 Estimated Construction GHG Emissions

Year	Emissions (MT CO_2e)
2023	389
2024	819
Total	1,208
Total Amortized over 30 Years	**40**

See Appendix A for CalEEMod worksheets.

COMBINED TOTAL ANNUAL EMISSIONS

Table 15 combines the construction, operational, and mobile GHG emissions associated with development of the Proposed Project. As shown therein, the Project's emissions would be approximately 753 MT CO_2e.

Table 15 Combined Annual GHG Emissions

Emission Source	Annual Emissions (MT CO_2e)
Construction	40
Area	<1
Energy	84
Mobile	592
Solid Waste	23
Water	14
Total	**753**

See Appendix A for CalEEMod worksheets.

4 Conclusions and Recommendations

As detailed above, neither construction nor operation of the Project would result in significant air quality or GHG emissions impacts with mitigation incorporated. The Project would be required to comply with the following RCMs, which were assumed in the modeling and analysis because the Project is required to comply with them through State and local regulations. In addition, the Project would comply with the following Mitigation Measure AQ-3. With incorporation of Mitigation Measure AQ-3, construction activities would not expose sensitive receptors to criteria pollutants and construction-related health impacts, including construction TAC emissions.

Regulatory Compliance Measures

RCM-1 Demolition, Grading, and Construction Activities: Compliance with Provisions of SCAQMD Rule 403

The Project shall comply with all applicable standards of Southern California Air Quality Management District (SCAQMD) Rule 403, including the following provisions:

- All unpaved demolition and construction areas shall be wetted at least twice daily during excavation and construction, and temporary dust covers shall be used to reduce dust emissions and meet SCAQMD Rule 403. Wetting could reduce fugitive dust by as much as 50 percent.
- The construction area shall be kept sufficiently dampened to control dust caused by grading and hauling, and at all times provide reasonable control of dust caused by wind.
- All clearing, earth moving, or excavation activities shall be discontinued during periods of high winds (i.e., greater than 15 mph), in order to prevent excessive amounts of dust.
- All dirt/soil shall be secured by trimming, watering, or other appropriate means to prevent spillage and dust.
- All dirt/soil materials transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- General contractors shall maintain and operate construction equipment to minimize exhaust emissions.
- Trucks having no current hauling activity shall not idle but be turned off.

RCM-2 Odors: Compliance with Provisions of SCAQMD Rule 402

The Project shall comply with the following provision of SCAQMD Rule 402: a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

RCM-3 Engine Idling

In accordance with Section 2485 of Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to five minutes at any location.

RCM-4 Emission Standards

In accordance with Section 93115 of Title 17 of the California Code of Regulations, operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

RCM-5 Architectural Coatings: Compliance with SCAQMD Rule 1113

The Project shall comply with SCAQMD Rule 1113 limiting the volatile organic compound (VOC) content of architectural coatings.

Mitigation Measure

AQ-3 Construction Emissions Reduction

Prior to issuance of grading permits, the City Engineer and the Chief Building Official shall confirm that the grading plan, building plans, and specifications stipulate that the following measures shall be implemented:

- All mobile off-road equipment (wheeled or tracked) greater than 50 horsepower used during construction activities shall meet the USEPA Tier 4 final standards Tier 4 certification can be for the original equipment or equipment that is retrofitted to meet the Tier 4 Final standards.
- A copy of the equipment's certification or model year specifications shall be available upon request for all equipment on-site.
- All unpaved demolition and construction areas shall be wetted at least twice times per day during excavation and construction.
- Electricity shall be supplied to the site from the existing power grid to support the electric construction equipment. If connection to the grid is determined to be infeasible for portions of the project, a non-diesel fueled generator shall be used.
- The project shall comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction.

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Appendix A

Air Quality and Greenhouse Gas Emissions Modeling Results

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Annual

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

Valor Elementary School Project - AQGHG

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	34.76	1000sqft	0.54	34,755.00	0
Other Asphalt Surfaces	30.63	1000sqft	0.70	30,628.00	0
Other Non-Asphalt Surfaces	16.37	1000sqft	0.38	16,366.00	0
Parking Lot	49.00	Space	0.44	19,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2024
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	691.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Adjusted acreage to match project description and site plan total lot acreage.

Construction Phase - Construction Schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Trips and VMT - Based on applicant provided information

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Annual

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

Grading - Based on applicant provided information

Architectural Coating - Based on SCAQMD Rule 1113

Vehicle Trips - Based on Linscott, Law & Greenspan, Engineers daily vehicle trips and VMT Transportation Assessment

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on SCAQMD Rule 1113

Water And Wastewater - No Septic tanks for the proposed project.

Solid Waste -

Construction Off-road Equipment Mitigation - Based on information provided by the applicant

Area Mitigation -

Waste Mitigation - The City of Los Angeles has achieved a soild waste diversion rate of 76 percent, reduced the soild waste generation rate by 26

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	10
tblConstructionPhase	NumDays	3.00	283.00
tblConstructionPhase	NumDays	6.00	43.00
tblConstructionPhase	NumDays	220.00	195.00
tblConstructionPhase	NumDays	10.00	64.00
tblConstructionPhase	NumDays	10.00	43.00
tblGrading	MaterialExported	0.00	2,500.00
tblLandUse	LandUseSquareFeet	34,760.00	34,755.00
tblLandUse	LandUseSquareFeet	30,630.00	30,628.00
tblLandUse	LandUseSquareFeet	16,370.00	16,366.00
tblLandUse	LotAcreage	0.80	0.54

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

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	HaulingTripNumber	247.00	250.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	11.97
tblVehicleTrips	WD_TR	19.52	35.45
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

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

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2103	1.9839	1.9398	4.4100e-003	0.3389	0.0864	0.4253	0.0996	0.0809	0.1805	0.0000	386.1086	386.1086	0.0936	3.1800e-003	389.3967
2024	0.5069	3.8025	4.1893	9.3100e-003	0.2246	0.1632	0.3878	0.0362	0.1530	0.1892	0.0000	812.7431	812.7431	0.1969	4.0800e-003	818.8812
Maximum	**0.5069**	**3.8025**	**4.1893**	**9.3100e-003**	**0.3389**	**0.1632**	**0.4253**	**0.0996**	**0.1530**	**0.1892**	**0.0000**	**812.7431**	**812.7431**	**0.1969**	**4.0800e-003**	**818.8812**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2103	1.9839	1.9398	4.4100e-003	0.3389	0.0864	0.4253	0.0996	0.0809	0.1805	0.0000	386.1082	386.1082	0.0936	3.1800e-003	389.3963
2024	0.5069	3.8025	4.1893	9.3100e-003	0.2246	0.1632	0.3878	0.0362	0.1530	0.1892	0.0000	812.7423	812.7423	0.1969	4.0800e-003	818.8803
Maximum	**0.5069**	**3.8025**	**4.1893**	**9.3100e-003**	**0.3389**	**0.1632**	**0.4253**	**0.0996**	**0.1530**	**0.1892**	**0.0000**	**812.7423**	**812.7423**	**0.1969**	**4.0800e-003**	**818.8803**

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

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2023**	**11-30-2023**	1.6767	1.6767
2	**12-1-2023**	**2-29-2024**	1.6015	1.6015
3	**3-1-2024**	**5-31-2024**	1.6830	1.6830
4	**6-1-2024**	**8-31-2024**	1.2594	1.2594
5	**9-1-2024**	**9-30-2024**	0.2675	0.2675
		Highest	1.6830	1.6830

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1390	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4600e-003
Energy	1.9300e-003	0.0176	0.0148	1.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	83.8912	83.8912	3.4600e-003	7.2000e-004	84.1936
Mobile	0.3469	0.3621	3.0568	6.1900e-003	0.6513	4.7200e-003	0.6560	0.1738	4.3900e-003	0.1782	0.0000	582.2849	582.2849	0.0433	0.0285	591.8590
Waste						0.0000	0.0000		0.0000	0.0000	9.1732	0.0000	9.1732	0.5421	0.0000	22.7261
Water						0.0000	0.0000		0.0000	0.0000	0.3566	13.1576	13.5142	9.9500e-003	8.5000e-004	14.0167
Total	**0.4879**	**0.3797**	**3.0732**	**6.3000e-003**	**0.6513**	**6.0600e-003**	**0.6574**	**0.1738**	**5.7300e-003**	**0.1796**	**9.5298**	**679.3369**	**688.8667**	**0.5988**	**0.0301**	**712.7989**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule 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	0.1390	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4600e-003
Energy	1.9300e-003	0.0176	0.0148	1.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	83.8912	83.8912	3.4600e-003	7.2000e-004	84.1936
Mobile	0.3469	0.3621	3.0568	6.1900e-003	0.6513	4.7200e-003	0.6560	0.1738	4.3900e-003	0.1782	0.0000	582.2849	582.2849	0.0433	0.0285	591.8590
Waste						0.0000	0.0000		0.0000	0.0000	6.7881	0.0000	6.7881	0.4012	0.0000	16.8173
Water						0.0000	0.0000		0.0000	0.0000	0.3566	13.1576	13.5142	9.9500e-003	8.5000e-004	14.0167
Total	**0.4879**	**0.3797**	**3.0732**	**6.3000e-003**	**0.6513**	**6.0600e-003**	**0.6574**	**0.1738**	**5.7300e-003**	**0.1796**	**7.1448**	**679.3369**	**686.4817**	**0.4579**	**0.0301**	**706.8901**

	ROG	NOx	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**	**25.03**	**0.00**	**0.35**	**23.54**	**0.00**	**0.83**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2023	10/1/2024	5	283	
2	Grading	Grading	9/1/2023	10/31/2023	5	43	
3	Building Construction	Building Construction	10/2/2023	6/28/2024	5	195	

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

4	Paving	Paving	2/1/2024	4/30/2024	5	64	
5	Architectural Coating	Architectural Coating	6/3/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 283

Acres of Grading (Grading Phase): 43

Acres of Paving: 1.52

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,133; Non-Residential Outdoor: 17,378; Striped Parking Area: 3,996 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Bore/Drill Rigs	1	8.00	221	0.50
Site Preparation	Cement and Mortar Mixers	1	8.00	9	0.56
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Pressure Washers	1	8.00	13	0.30
Site Preparation	Rollers	1	8.00	80	0.38
Site Preparation	Scrapers	0	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	1	8.00	231	0.29

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

Building Construction	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	1	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	8.00	9	0.56
Paving	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Pressure Washers	1	8.00	13	0.30
Paving	Rollers	0	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	8.00	63	0.31
Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Forklifts	1	8.00	89	0.20
Architectural Coating	Generator Sets	1	8.00	84	0.74
Architectural Coating	Pressure Washers	1	8.00	13	0.30
Architectural Coating	Surfacing Equipment	1	8.00	263	0.30

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
Site Preparation	11	28.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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

Building Construction	11	43.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	5	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.1501	0.0000	0.1501	0.0162	0.0000	0.0162	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1046	1.0384	0.9367	2.0700e-003		0.0470	0.0470		0.0437	0.0437	0.0000	179.6742	179.6742	0.0510	0.0000	180.9490
Total	**0.1046**	**1.0384**	**0.9367**	**2.0700e-003**	**0.1501**	**0.0470**	**0.1970**	**0.0162**	**0.0437**	**0.0599**	**0.0000**	**179.6742**	**179.6742**	**0.0510**	**0.0000**	**180.9490**

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

3.2 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	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	3.7500e-003	2.8900e-003	0.0394	1.1000e-004	0.0132	8.0000e-005	0.0133	3.5100e-003	7.0000e-005	3.5800e-003	0.0000	10.4670	10.4670	2.7000e-004	2.7000e-004	10.5529
Total	**3.7500e-003**	**2.8900e-003**	**0.0394**	**1.1000e-004**	**0.0132**	**8.0000e-005**	**0.0133**	**3.5100e-003**	**7.0000e-005**	**3.5800e-003**	**0.0000**	**10.4670**	**10.4670**	**2.7000e-004**	**2.7000e-004**	**10.5529**

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					0.1501	0.0000	0.1501	0.0162	0.0000	0.0162	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1046	1.0384	0.9367	2.0700e-003		0.0470	0.0470		0.0437	0.0437	0.0000	179.6740	179.6740	0.0510	0.0000	180.9488
Total	**0.1046**	**1.0384**	**0.9367**	**2.0700e-003**	**0.1501**	**0.0470**	**0.1970**	**0.0162**	**0.0437**	**0.0599**	**0.0000**	**179.6740**	**179.6740**	**0.0510**	**0.0000**	**180.9488**

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

3.2 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	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	3.7500e-003	2.8900e-003	0.0394	1.1000e-004	0.0132	8.0000e-005	0.0133	3.5100e-003	7.0000e-005	3.5800e-003	0.0000	10.4670	10.4670	2.7000e-004	2.7000e-004	10.5529
Total	**3.7500e-003**	**2.8900e-003**	**0.0394**	**1.1000e-004**	**0.0132**	**8.0000e-005**	**0.0133**	**3.5100e-003**	**7.0000e-005**	**3.5800e-003**	**0.0000**	**10.4670**	**10.4670**	**2.7000e-004**	**2.7000e-004**	**10.5529**

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1501	0.0000	0.1501	0.0162	0.0000	0.0162	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2286	2.2167	2.1390	4.7400e-003		0.0989	0.0989		0.0920	0.0920	0.0000	411.8010	411.8010	0.1168	0.0000	414.7207
Total	**0.2286**	**2.2167**	**2.1390**	**4.7400e-003**	**0.1501**	**0.0989**	**0.2489**	**0.0162**	**0.0920**	**0.1082**	**0.0000**	**411.8010**	**411.8010**	**0.1168**	**0.0000**	**414.7207**

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

3.2 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	8.0400e-003	5.9100e-003	0.0842	2.5000e-004	0.0303	1.7000e-004	0.0304	8.0400e-003	1.5000e-004	8.1900e-003	0.0000	23.4615	23.4615	5.5000e-004	5.7000e-004	23.6442
Total	**8.0400e-003**	**5.9100e-003**	**0.0842**	**2.5000e-004**	**0.0303**	**1.7000e-004**	**0.0304**	**8.0400e-003**	**1.5000e-004**	**8.1900e-003**	**0.0000**	**23.4615**	**23.4615**	**5.5000e-004**	**5.7000e-004**	**23.6442**

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					0.1501	0.0000	0.1501	0.0162	0.0000	0.0162	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2286	2.2167	2.1390	4.7400e-003		0.0989	0.0989		0.0920	0.0920	0.0000	411.8005	411.8005	0.1168	0.0000	414.7202
Total	**0.2286**	**2.2167**	**2.1390**	**4.7400e-003**	**0.1501**	**0.0989**	**0.2489**	**0.0162**	**0.0920**	**0.1082**	**0.0000**	**411.8005**	**411.8005**	**0.1168**	**0.0000**	**414.7202**

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

3.2 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	8.0400e-003	5.9100e-003	0.0842	2.5000e-004	0.0303	1.7000e-004	0.0304	8.0400e-003	1.5000e-004	8.1900e-003	0.0000	23.4615	23.4615	5.5000e-004	5.7000e-004	23.6442
Total	**8.0400e-003**	**5.9100e-003**	**0.0842**	**2.5000e-004**	**0.0303**	**1.7000e-004**	**0.0304**	**8.0400e-003**	**1.5000e-004**	**8.1900e-003**	**0.0000**	**23.4615**	**23.4615**	**5.5000e-004**	**5.7000e-004**	**23.6442**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1523	0.0000	0.1523	0.0736	0.0000	0.0736	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.2920	0.1777	4.5000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	39.0566	39.0566	0.0125	0.0000	39.3687
Total	**0.0279**	**0.2920**	**0.1777**	**4.5000e-004**	**0.1523**	**0.0120**	**0.1643**	**0.0736**	**0.0110**	**0.0847**	**0.0000**	**39.0566**	**39.0566**	**0.0125**	**0.0000**	**39.3687**

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

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6000e-004	0.0159	4.2600e-003	7.0000e-005	2.1500e-003	1.1000e-004	2.2700e-003	5.9000e-004	1.1000e-004	7.0000e-004	0.0000	7.1300	7.1300	4.0000e-004	1.1300e-003	7.4775
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	5.2000e-004	7.0300e-003	2.0000e-005	2.3600e-003	1.0000e-005	2.3700e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.8691	1.8691	5.0000e-005	5.0000e-005	1.8844
Total	**9.3000e-004**	**0.0164**	**0.0113**	**9.0000e-005**	**4.5100e-003**	**1.2000e-004**	**4.6400e-003**	**1.2200e-003**	**1.2000e-004**	**1.3400e-003**	**0.0000**	**8.9991**	**8.9991**	**4.5000e-004**	**1.1800e-003**	**9.3619**

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					0.1523	0.0000	0.1523	0.0736	0.0000	0.0736	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0279	0.2920	0.1777	4.5000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	39.0565	39.0565	0.0125	0.0000	39.3686
Total	**0.0279**	**0.2920**	**0.1777**	**4.5000e-004**	**0.1523**	**0.0120**	**0.1643**	**0.0736**	**0.0110**	**0.0847**	**0.0000**	**39.0565**	**39.0565**	**0.0125**	**0.0000**	**39.3686**

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

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6000e-004	0.0159	4.2600e-003	7.0000e-005	2.1500e-003	1.1000e-004	2.2700e-003	5.9000e-004	1.1000e-004	7.0000e-004	0.0000	7.1300	7.1300	4.0000e-004	1.1300e-003	7.4775
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	5.2000e-004	7.0300e-003	2.0000e-005	2.3600e-003	1.0000e-005	2.3700e-003	6.3000e-004	1.0000e-005	6.4000e-004	0.0000	1.8691	1.8691	5.0000e-005	5.0000e-005	1.8844
Total	**9.3000e-004**	**0.0164**	**0.0113**	**9.0000e-005**	**4.5100e-003**	**1.2000e-004**	**4.6400e-003**	**1.2200e-003**	**1.2000e-004**	**1.3400e-003**	**0.0000**	**8.9991**	**8.9991**	**4.5000e-004**	**1.1800e-003**	**9.3619**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0682	0.6099	0.7209	1.4600e-003		0.0270	0.0270		0.0257	0.0257	0.0000	125.9297	125.9297	0.0288	0.0000	126.6496
Total	**0.0682**	**0.6099**	**0.7209**	**1.4600e-003**		**0.0270**	**0.0270**		**0.0257**	**0.0257**	**0.0000**	**125.9297**	**125.9297**	**0.0288**	**0.0000**	**126.6496**

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

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-004	0.0211	8.0100e-003	1.0000e-004	3.4800e-003	1.2000e-004	3.6000e-003	1.0100e-003	1.1000e-004	1.1200e-003	0.0000	9.8329	9.8329	3.3000e-004	1.4200e-003	10.2657
Worker	4.3600e-003	3.3500e-003	0.0457	1.3000e-004	0.0153	9.0000e-005	0.0154	4.0700e-003	8.0000e-005	4.1500e-003	0.0000	12.1492	12.1492	3.1000e-004	3.1000e-004	12.2489
Total	**4.9600e-003**	**0.0244**	**0.0537**	**2.3000e-004**	**0.0188**	**2.1000e-004**	**0.0190**	**5.0800e-003**	**1.9000e-004**	**5.2700e-003**	**0.0000**	**21.9821**	**21.9821**	**6.4000e-004**	**1.7300e-003**	**22.5146**

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	0.0682	0.6099	0.7209	1.4600e-003		0.0270	0.0270		0.0257	0.0257	0.0000	125.9296	125.9296	0.0288	0.0000	126.6495
Total	**0.0682**	**0.6099**	**0.7209**	**1.4600e-003**		**0.0270**	**0.0270**		**0.0257**	**0.0257**	**0.0000**	**125.9296**	**125.9296**	**0.0288**	**0.0000**	**126.6495**

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

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-004	0.0211	8.0100e-003	1.0000e-004	3.4800e-003	1.2000e-004	3.6000e-003	1.0100e-003	1.1000e-004	1.1200e-003	0.0000	9.8329	9.8329	3.3000e-004	1.4200e-003	10.2657
Worker	4.3600e-003	3.3500e-003	0.0457	1.3000e-004	0.0153	9.0000e-005	0.0154	4.0700e-003	8.0000e-005	4.1500e-003	0.0000	12.1492	12.1492	3.1000e-004	3.1000e-004	12.2489
Total	**4.9600e-003**	**0.0244**	**0.0537**	**2.3000e-004**	**0.0188**	**2.1000e-004**	**0.0190**	**5.0800e-003**	**1.9000e-004**	**5.2700e-003**	**0.0000**	**21.9821**	**21.9821**	**6.4000e-004**	**1.7300e-003**	**22.5146**

3.4 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	0.1289	1.1407	1.4372	2.9200e-003		0.0482	0.0482		0.0459	0.0459	0.0000	252.0054	252.0054	0.0574	0.0000	253.4393
Total	**0.1289**	**1.1407**	**1.4372**	**2.9200e-003**		**0.0482**	**0.0482**		**0.0459**	**0.0459**	**0.0000**	**252.0054**	**252.0054**	**0.0574**	**0.0000**	**253.4393**

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

3.4 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	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	1.1700e-003	0.0423	0.0158	2.0000e-004	6.9700e-003	2.3000e-004	7.2000e-003	2.0100e-003	2.2000e-004	2.2400e-003	0.0000	19.3832	19.3832	6.6000e-004	2.8100e-003	20.2378
Worker	8.1500e-003	5.9900e-003	0.0853	2.5000e-004	0.0307	1.7000e-004	0.0308	8.1400e-003	1.6000e-004	8.3000e-003	0.0000	23.7762	23.7762	5.6000e-004	5.7000e-004	23.9614
Total	**9.3200e-003**	**0.0483**	**0.1011**	**4.5000e-004**	**0.0376**	**4.0000e-004**	**0.0380**	**0.0102**	**3.8000e-004**	**0.0105**	**0.0000**	**43.1594**	**43.1594**	**1.2200e-003**	**3.3800e-003**	**44.1992**

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	0.1289	1.1406	1.4372	2.9200e-003		0.0482	0.0482		0.0459	0.0459	0.0000	252.0051	252.0051	0.0574	0.0000	253.4390
Total	**0.1289**	**1.1406**	**1.4372**	**2.9200e-003**		**0.0482**	**0.0482**		**0.0459**	**0.0459**	**0.0000**	**252.0051**	**252.0051**	**0.0574**	**0.0000**	**253.4390**

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

3.4 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	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	1.1700e-003	0.0423	0.0158	2.0000e-004	6.9700e-003	2.3000e-004	7.2000e-003	2.0100e-003	2.2000e-004	2.2400e-003	0.0000	19.3832	19.3832	6.6000e-004	2.8100e-003	20.2378
Worker	8.1500e-003	5.9900e-003	0.0853	2.5000e-004	0.0307	1.7000e-004	0.0308	8.1400e-003	1.6000e-004	8.3000e-003	0.0000	23.7762	23.7762	5.6000e-004	5.7000e-004	23.9614
Total	**9.3200e-003**	**0.0483**	**0.1011**	**4.5000e-004**	**0.0376**	**4.0000e-004**	**0.0380**	**0.0102**	**3.8000e-004**	**0.0105**	**0.0000**	**43.1594**	**43.1594**	**1.2200e-003**	**3.3800e-003**	**44.1992**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0251	0.2541	0.2423	5.3000e-004		9.9400e-003	9.9400e-003		9.2000e-003	9.2000e-003	0.0000	45.3942	45.3942	0.0142	0.0000	45.7493
Paving	1.4900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0266**	**0.2541**	**0.2423**	**5.3000e-004**		**9.9400e-003**	**9.9400e-003**		**9.2000e-003**	**9.2000e-003**	**0.0000**	**45.3942**	**45.3942**	**0.0142**	**0.0000**	**45.7493**

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

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	8.9000e-004	0.0127	4.0000e-005	4.5600e-003	3.0000e-005	4.5900e-003	1.2100e-003	2.0000e-005	1.2400e-003	0.0000	3.5388	3.5388	8.0000e-005	9.0000e-005	3.5664
Total	**1.2100e-003**	**8.9000e-004**	**0.0127**	**4.0000e-005**	**4.5600e-003**	**3.0000e-005**	**4.5900e-003**	**1.2100e-003**	**2.0000e-005**	**1.2400e-003**	**0.0000**	**3.5388**	**3.5388**	**8.0000e-005**	**9.0000e-005**	**3.5664**

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	0.0251	0.2541	0.2423	5.3000e-004		9.9400e-003	9.9400e-003		9.2000e-003	9.2000e-003	0.0000	45.3942	45.3942	0.0142	0.0000	45.7493
Paving	1.4900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0266**	**0.2541**	**0.2423**	**5.3000e-004**		**9.9400e-003**	**9.9400e-003**		**9.2000e-003**	**9.2000e-003**	**0.0000**	**45.3942**	**45.3942**	**0.0142**	**0.0000**	**45.7493**

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

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	8.9000e-004	0.0127	4.0000e-005	4.5600e-003	3.0000e-005	4.5900e-003	1.2100e-003	2.0000e-005	1.2400e-003	0.0000	3.5388	3.5388	8.0000e-005	9.0000e-005	3.5664
Total	**1.2100e-003**	**8.9000e-004**	**0.0127**	**4.0000e-005**	**4.5600e-003**	**3.0000e-005**	**4.5900e-003**	**1.2100e-003**	**2.0000e-005**	**1.2400e-003**	**0.0000**	**3.5388**	**3.5388**	**8.0000e-005**	**9.0000e-005**	**3.5664**

3.6 Architectural Coating - 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					
Archit. Coating	0.0898					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0138	0.1356	0.1669	3.7000e-004		5.6100e-003	5.6100e-003		5.3800e-003	5.3800e-003	0.0000	31.7369	31.7369	6.6500e-003	0.0000	31.9032
Total	**0.1036**	**0.1356**	**0.1669**	**3.7000e-004**		**5.6100e-003**	**5.6100e-003**		**5.3800e-003**	**5.3800e-003**	**0.0000**	**31.7369**	**31.7369**	**6.6500e-003**	**0.0000**	**31.9032**

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

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	4.1000e-004	5.9100e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.6461	1.6461	4.0000e-005	4.0000e-005	1.6589
Total	**5.6000e-004**	**4.1000e-004**	**5.9100e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.7000e-004**	**0.0000**	**1.6461**	**1.6461**	**4.0000e-005**	**4.0000e-005**	**1.6589**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0898					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0138	0.1356	0.1669	3.7000e-004		5.6100e-003	5.6100e-003		5.3800e-003	5.3800e-003	0.0000	31.7368	31.7368	6.6500e-003	0.0000	31.9032
Total	**0.1036**	**0.1356**	**0.1669**	**3.7000e-004**		**5.6100e-003**	**5.6100e-003**		**5.3800e-003**	**5.3800e-003**	**0.0000**	**31.7368**	**31.7368**	**6.6500e-003**	**0.0000**	**31.9032**

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

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	4.1000e-004	5.9100e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.6461	1.6461	4.0000e-005	4.0000e-005	1.6589
Total	**5.6000e-004**	**4.1000e-004**	**5.9100e-003**	**2.0000e-005**	**2.1200e-003**	**1.0000e-005**	**2.1300e-003**	**5.6000e-004**	**1.0000e-005**	**5.7000e-004**	**0.0000**	**1.6461**	**1.6461**	**4.0000e-005**	**4.0000e-005**	**1.6589**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive 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	0.3469	0.3621	3.0568	6.1900e-003	0.6513	4.7200e-003	0.6560	0.1738	4.3900e-003	0.1782	0.0000	582.2849	582.2849	0.0433	0.0285	591.8590
Unmitigated	0.3469	0.3621	3.0568	6.1900e-003	0.6513	4.7200e-003	0.6560	0.1738	4.3900e-003	0.1782	0.0000	582.2849	582.2849	0.0433	0.0285	591.8590

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	1,232.24	0.00	0.00	1,730,067	1,730,067
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,232.24	0.00	0.00	1,730,067	1,730,067

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
Elementary School	11.97	0.00	0.00	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Other Asphalt Surfaces	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Other Non-Asphalt Surfaces	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Parking Lot	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	64.7697	64.7697	3.0900e-003	3.7000e-004	64.9584
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	64.7697	64.7697	3.0900e-003	3.7000e-004	64.9584
NaturalGas Mitigated	1.9300e-003	0.0176	0.0148	1.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	19.1215	19.1215	3.7000e-004	3.5000e-004	19.2352
NaturalGas Unmitigated	1.9300e-003	0.0176	0.0148	1.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	19.1215	19.1215	3.7000e-004	3.5000e-004	19.2352

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	358324	1.9300e-003	0.0176	0.0148	1.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	19.1215	19.1215	3.7000e-004	3.5000e-004	19.2352
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		**1.9300e-003**	**0.0176**	**0.0148**	**1.1000e-004**		**1.3300e-003**	**1.3300e-003**		**1.3300e-003**	**1.3300e-003**	**0.0000**	**19.1215**	**19.1215**	**3.7000e-004**	**3.5000e-004**	**19.2352**

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	358324	1.9300e-003	0.0176	0.0148	1.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	19.1215	19.1215	3.7000e-004	3.5000e-004	19.2352
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		**1.9300e-003**	**0.0176**	**0.0148**	**1.1000e-004**		**1.3300e-003**	**1.3300e-003**		**1.3300e-003**	**1.3300e-003**	**0.0000**	**19.1215**	**19.1215**	**3.7000e-004**	**3.5000e-004**	**19.2352**

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	199494	62.6165	2.9900e-003	3.6000e-004	62.7990
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	6860	2.1532	1.0000e-004	1.0000e-005	2.1595
Total		**64.7697**	**3.0900e-003**	**3.7000e-004**	**64.9584**

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

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	199494	62.6165	2.9900e-003	3.6000e-004	62.7990
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	6860	2.1532	1.0000e-004	1.0000e-005	2.1595
Total		**64.7697**	**3.0900e-003**	**3.7000e-004**	**64.9584**

6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1390	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4600e-003
Unmitigated	0.1390	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1299					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4600e-003
Total	**0.1390**	**2.0000e-005**	**1.6700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.2500e-003**	**3.2500e-003**	**1.0000e-005**	**0.0000**	**3.4600e-003**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1299					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	2.0000e-005	1.6700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.2500e-003	3.2500e-003	1.0000e-005	0.0000	3.4600e-003
Total	**0.1390**	**2.0000e-005**	**1.6700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.2500e-003**	**3.2500e-003**	**1.0000e-005**	**0.0000**	**3.4600e-003**

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 Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.5142	9.9500e-003	8.5000e-004	14.0167
Unmitigated	13.5142	9.9500e-003	8.5000e-004	14.0167

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.00793 / 2.59183	13.5142	9.9500e-003	8.5000e-004	14.0167
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**13.5142**	**9.9500e-003**	**8.5000e-004**	**14.0167**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.00793 / 2.59183	13.5142	9.9500e-003	8.5000e-004	14.0167
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**13.5142**	**9.9500e-003**	**8.5000e-004**	**14.0167**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.7881	0.4012	0.0000	16.8173
Unmitigated	9.1732	0.5421	0.0000	22.7261

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	45.19	9.1732	0.5421	0.0000	22.7261
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**9.1732**	**0.5421**	**0.0000**	**22.7261**

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

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	33.4406	6.7881	0.4012	0.0000	16.8173
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**6.7881**	**0.4012**	**0.0000**	**16.8173**

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 Applied

Equipment Type	Number

11.0 Vegetation

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

Valor Elementary School Project - AQGHG

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	34.76	1000sqft	0.54	34,755.00	0
Other Asphalt Surfaces	30.63	1000sqft	0.70	30,628.00	0
Other Non-Asphalt Surfaces	16.37	1000sqft	0.38	16,366.00	0
Parking Lot	49.00	Space	0.44	19,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2024
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	691.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Adjusted acreage to match project description and site plan total lot acreage.

Construction Phase - Construction Schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Trips and VMT - Based on applicant provided information

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

Grading - Based on applicant provided information

Architectural Coating - Based on SCAQMD Rule 1113

Vehicle Trips - Based on Linscott, Law & Greenspan, Engineers daily vehicle trips and VMT Transportation Assessment

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on SCAQMD Rule 1113

Water And Wastewater - No Septic tanks for the proposed project.

Solid Waste -

Construction Off-road Equipment Mitigation - Based on information provided by the applicant

Area Mitigation -

Waste Mitigation - The City of Los Angeles has achieved a soild waste diversion rate of 76 percent, reduced the soild waste generation rate by 26

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	10
tblConstructionPhase	NumDays	3.00	283.00
tblConstructionPhase	NumDays	6.00	43.00
tblConstructionPhase	NumDays	220.00	195.00
tblConstructionPhase	NumDays	10.00	64.00
tblConstructionPhase	NumDays	10.00	43.00
tblGrading	MaterialExported	0.00	2,500.00
tblLandUse	LandUseSquareFeet	34,760.00	34,755.00
tblLandUse	LandUseSquareFeet	30,630.00	30,628.00
tblLandUse	LandUseSquareFeet	16,370.00	16,366.00
tblLandUse	LotAcreage	0.80	0.54

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

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	HaulingTripNumber	247.00	250.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	11.97
tblVehicleTrips	WD_TR	19.52	35.45
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.1173	57.9841	55.5217	0.1281	9.2590	2.4952	11.7542	3.8386	2.3359	6.1745	0.0000	12,389.8642	12,389.8642	2.9749	0.1246	12,501.3679
2024	9.3802	48.7747	54.4527	0.1208	2.1083	2.0641	4.1724	0.3949	1.9353	2.3302	0.0000	11,622.0960	11,622.0960	2.7984	0.0653	11,707.5388
Maximum	**9.3802**	**57.9841**	**55.5217**	**0.1281**	**9.2590**	**2.4952**	**11.7542**	**3.8386**	**2.3359**	**6.1745**	**0.0000**	**12,389.8642**	**12,389.8642**	**2.9749**	**0.1246**	**12,501.3679**

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	6.1173	57.9841	55.5217	0.1281	9.2590	2.4952	11.7542	3.8386	2.3359	6.1745	0.0000	12,389.8642	12,389.8642	2.9749	0.1246	12,501.3679
2024	9.3802	48.7747	54.4527	0.1208	2.1083	2.0641	4.1724	0.3949	1.9353	2.3302	0.0000	11,622.0960	11,622.0960	2.7984	0.0653	11,707.5387
Maximum	**9.3802**	**57.9841**	**55.5217**	**0.1281**	**9.2590**	**2.4952**	**11.7542**	**3.8386**	**2.3359**	**6.1745**	**0.0000**	**12,389.8642**	**12,389.8642**	**2.9749**	**0.1246**	**12,501.3679**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

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

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Energy	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Mobile	2.8540	2.5695	23.6830	0.0494	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		5,118.8407	5,118.8407	0.3542	0.2314	5,196.6393
Total	**3.6267**	**2.6659**	**23.7772**	**0.0500**	**5.1034**	**0.0437**	**5.1472**	**1.3600**	**0.0412**	**1.4011**		**5,234.3646**	**5,234.3646**	**0.3565**	**0.2335**	**5,312.8514**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Energy	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Mobile	2.8540	2.5695	23.6830	0.0494	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		5,118.8407	5,118.8407	0.3542	0.2314	5,196.6393
Total	**3.6267**	**2.6659**	**23.7772**	**0.0500**	**5.1034**	**0.0437**	**5.1472**	**1.3600**	**0.0412**	**1.4011**		**5,234.3646**	**5,234.3646**	**0.3565**	**0.2335**	**5,312.8514**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2023	10/1/2024	5	283	
2	Grading	Grading	9/1/2023	10/31/2023	5	43	
3	Building Construction	Building Construction	10/2/2023	6/28/2024	5	195	
4	Paving	Paving	2/1/2024	4/30/2024	5	64	
5	Architectural Coating	Architectural Coating	6/3/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 283

Acres of Grading (Grading Phase): 43

Acres of Paving: 1.52

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,133; Non-Residential Outdoor: 17,378; Striped Parking Area: 3,996 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Bore/Drill Rigs	1	8.00	221	0.50
Site Preparation	Cement and Mortar Mixers	1	8.00	9	0.56
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Graders	1	8.00	187	0.41

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

Site Preparation	Pressure Washers	1	8.00	13	0.30
Site Preparation	Rollers	1	8.00	80	0.38
Site Preparation	Scrapers	0	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	1	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	8.00	9	0.56
Paving	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Pressure Washers	1	8.00	13	0.30
Paving	Rollers	0	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	8.00	63	0.31

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

Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Forklifts	1	8.00	89	0.20
Architectural Coating	Generator Sets	1	8.00	84	0.74
Architectural Coating	Pressure Washers	1	8.00	13	0.30
Architectural Coating	Surfacing Equipment	1	8.00	263	0.30

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
Site Preparation	11	28.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	11	43.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	5	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.2 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					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.4317	24.1478	21.7831	0.0481		1.0923	1.0923		1.0173	1.0173		4,605.9742	4,605.9742	1.3072		4,638.6550
Total	**2.4317**	**24.1478**	**21.7831**	**0.0481**	**1.0605**	**1.0923**	**2.1528**	**0.1145**	**1.0173**	**1.1318**		**4,605.9742**	**4,605.9742**	**1.3072**		**4,638.6550**

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	0.0894	0.0600	0.9849	2.7400e-003	0.3130	1.7600e-003	0.3147	0.0830	1.6200e-003	0.0846		280.5598	280.5598	6.7200e-003	6.3300e-003	282.6136
Total	**0.0894**	**0.0600**	**0.9849**	**2.7400e-003**	**0.3130**	**1.7600e-003**	**0.3147**	**0.0830**	**1.6200e-003**	**0.0846**		**280.5598**	**280.5598**	**6.7200e-003**	**6.3300e-003**	**282.6136**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.2 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	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.4317	24.1478	21.7831	0.0481		1.0923	1.0923		1.0173	1.0173	0.0000	4,605.9742	4,605.9742	1.3072		4,638.6550
Total	**2.4317**	**24.1478**	**21.7831**	**0.0481**	**1.0605**	**1.0923**	**2.1528**	**0.1145**	**1.0173**	**1.1318**	**0.0000**	**4,605.9742**	**4,605.9742**	**1.3072**		**4,638.6550**

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	0.0894	0.0600	0.9849	2.7400e-003	0.3130	1.7600e-003	0.3147	0.0830	1.6200e-003	0.0846		280.5598	280.5598	6.7200e-003	6.3300e-003	282.6136
Total	**0.0894**	**0.0600**	**0.9849**	**2.7400e-003**	**0.3130**	**1.7600e-003**	**0.3147**	**0.0830**	**1.6200e-003**	**0.0846**		**280.5598**	**280.5598**	**6.7200e-003**	**6.3300e-003**	**282.6136**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.3207	22.5043	21.7160	0.0481		1.0037	1.0037		0.9344	0.9344		4,608.4556	4,608.4556	1.3070		4,641.1304
Total	**2.3207**	**22.5043**	**21.7160**	**0.0481**	**1.0605**	**1.0037**	**2.0642**	**0.1145**	**0.9344**	**1.0489**		**4,608.4556**	**4,608.4556**	**1.3070**		**4,641.1304**

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	0.0835	0.0537	0.9187	2.6600e-003	0.3130	1.6900e-003	0.3147	0.0830	1.5500e-003	0.0846		274.5247	274.5247	6.0800e-003	5.8900e-003	276.4326
Total	**0.0835**	**0.0537**	**0.9187**	**2.6600e-003**	**0.3130**	**1.6900e-003**	**0.3147**	**0.0830**	**1.5500e-003**	**0.0846**		**274.5247**	**274.5247**	**6.0800e-003**	**5.8900e-003**	**276.4326**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.2 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.3207	22.5043	21.7160	0.0481		1.0037	1.0037		0.9344	0.9344	0.0000	4,608.4556	4,608.4556	1.3070		4,641.1304
Total	**2.3207**	**22.5043**	**21.7160**	**0.0481**	**1.0605**	**1.0037**	**2.0642**	**0.1145**	**0.9344**	**1.0489**	**0.0000**	**4,608.4556**	**4,608.4556**	**1.3070**		**4,641.1304**

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	0.0835	0.0537	0.9187	2.6600e-003	0.3130	1.6900e-003	0.3147	0.0830	1.5500e-003	0.0846		274.5247	274.5247	6.0800e-003	5.8900e-003	276.4326
Total	**0.0835**	**0.0537**	**0.9187**	**2.6600e-003**	**0.3130**	**1.6900e-003**	**0.3147**	**0.0830**	**1.5500e-003**	**0.0846**		**274.5247**	**274.5247**	**6.0800e-003**	**5.8900e-003**	**276.4326**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.2969	13.5801	8.2672	0.0208		0.5573	0.5573		0.5135	0.5135		2,002.4409	2,002.4409	0.6401		2,018.4424
Total	**1.2969**	**13.5801**	**8.2672**	**0.0208**	**7.0826**	**0.5573**	**7.6398**	**3.4247**	**0.5135**	**3.9382**		**2,002.4409**	**2,002.4409**	**0.6401**		**2,018.4424**

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	0.0125	0.7003	0.1970	3.3200e-003	0.1017	5.3100e-003	0.1070	0.0279	5.0800e-003	0.0330		365.3840	365.3840	0.0203	0.0581	383.1904
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	0.0319	0.0214	0.3517	9.8000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		100.1999	100.1999	2.4000e-003	2.2600e-003	100.9334
Total	**0.0445**	**0.7218**	**0.5487**	**4.3000e-003**	**0.2135**	**5.9400e-003**	**0.2194**	**0.0575**	**5.6600e-003**	**0.0632**		**465.5839**	**465.5839**	**0.0227**	**0.0603**	**484.1238**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.2969	13.5801	8.2672	0.0208		0.5573	0.5573		0.5135	0.5135	0.0000	2,002.4409	2,002.4409	0.6401		2,018.4424
Total	**1.2969**	**13.5801**	**8.2672**	**0.0208**	**7.0826**	**0.5573**	**7.6398**	**3.4247**	**0.5135**	**3.9382**	**0.0000**	**2,002.4409**	**2,002.4409**	**0.6401**		**2,018.4424**

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	0.0125	0.7003	0.1970	3.3200e-003	0.1017	5.3100e-003	0.1070	0.0279	5.0800e-003	0.0330		365.3840	365.3840	0.0203	0.0581	383.1904
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	0.0319	0.0214	0.3517	9.8000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		100.1999	100.1999	2.4000e-003	2.2600e-003	100.9334
Total	**0.0445**	**0.7218**	**0.5487**	**4.3000e-003**	**0.2135**	**5.9400e-003**	**0.2194**	**0.0575**	**5.6600e-003**	**0.0632**		**465.5839**	**465.5839**	**0.0227**	**0.0603**	**484.1238**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0987	18.7651	22.1825	0.0449		0.8317	0.8317		0.7920	0.7920		4,271.1933	4,271.1933	0.9767		4,295.6098
Total	**2.0987**	**18.7651**	**22.1825**	**0.0449**		**0.8317**	**0.8317**		**0.7920**	**0.7920**		**4,271.1933**	**4,271.1933**	**0.9767**		**4,295.6098**

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	0.0188	0.6171	0.2430	3.0900e-003	0.1089	3.5900e-003	0.1125	0.0313	3.4400e-003	0.0348		333.2526	333.2526	0.0112	0.0482	347.9095
Worker	0.1374	0.0922	1.5125	4.2100e-003	0.4806	2.7100e-003	0.4834	0.1275	2.4900e-003	0.1300		430.8596	430.8596	0.0103	9.7200e-003	434.0138
Total	**0.1562**	**0.7093**	**1.7554**	**7.3000e-003**	**0.5895**	**6.3000e-003**	**0.5958**	**0.1588**	**5.9300e-003**	**0.1647**		**764.1122**	**764.1122**	**0.0215**	**0.0580**	**781.9233**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0987	18.7651	22.1825	0.0449		0.8317	0.8317		0.7920	0.7920	0.0000	4,271.1933	4,271.1933	0.9767		4,295.6098
Total	**2.0987**	**18.7651**	**22.1825**	**0.0449**		**0.8317**	**0.8317**		**0.7920**	**0.7920**	**0.0000**	**4,271.1933**	**4,271.1933**	**0.9767**		**4,295.6098**

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	0.0188	0.6171	0.2430	3.0900e-003	0.1089	3.5900e-003	0.1125	0.0313	3.4400e-003	0.0348		333.2526	333.2526	0.0112	0.0482	347.9095
Worker	0.1374	0.0922	1.5125	4.2100e-003	0.4806	2.7100e-003	0.4834	0.1275	2.4900e-003	0.1300		430.8596	430.8596	0.0103	9.7200e-003	434.0138
Total	**0.1562**	**0.7093**	**1.7554**	**7.3000e-003**	**0.5895**	**6.3000e-003**	**0.5958**	**0.1588**	**5.9300e-003**	**0.1647**		**764.1122**	**764.1122**	**0.0215**	**0.0580**	**781.9233**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.4 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	1.9834	17.5484	22.1112	0.0450		0.7412	0.7412		0.7053	0.7053		4,273.6676	4,273.6676	0.9727		4,297.9854
Total	**1.9834**	**17.5484**	**22.1112**	**0.0450**		**0.7412**	**0.7412**		**0.7053**	**0.7053**		**4,273.6676**	**4,273.6676**	**0.9727**		**4,297.9854**

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	0.0184	0.6199	0.2390	3.0500e-003	0.1089	3.6000e-003	0.1125	0.0313	3.4500e-003	0.0348		328.4584	328.4584	0.0112	0.0476	342.9294
Worker	0.1283	0.0824	1.4109	4.0900e-003	0.4806	2.5900e-003	0.4832	0.1275	2.3900e-003	0.1299		421.5915	421.5915	9.3400e-003	9.0500e-003	424.5215
Total	**0.1466**	**0.7023**	**1.6499**	**7.1400e-003**	**0.5895**	**6.1900e-003**	**0.5957**	**0.1588**	**5.8400e-003**	**0.1647**		**750.0499**	**750.0499**	**0.0205**	**0.0567**	**767.4510**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.4 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	lb/day										lb/day					
Off-Road	1.9834	17.5484	22.1112	0.0450		0.7412	0.7412		0.7053	0.7053	0.0000	4,273.6676	4,273.6676	0.9727		4,297.9854
Total	**1.9834**	**17.5484**	**22.1112**	**0.0450**		**0.7412**	**0.7412**		**0.7053**	**0.7053**	**0.0000**	**4,273.6676**	**4,273.6676**	**0.9727**		**4,297.9854**

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	0.0184	0.6199	0.2390	3.0500e-003	0.1089	3.6000e-003	0.1125	0.0313	3.4500e-003	0.0348		328.4584	328.4584	0.0112	0.0476	342.9294
Worker	0.1283	0.0824	1.4109	4.0900e-003	0.4806	2.5900e-003	0.4832	0.1275	2.3900e-003	0.1299		421.5915	421.5915	9.3400e-003	9.0500e-003	424.5215
Total	**0.1466**	**0.7023**	**1.6499**	**7.1400e-003**	**0.5895**	**6.1900e-003**	**0.5957**	**0.1588**	**5.8400e-003**	**0.1647**		**750.0499**	**750.0499**	**0.0205**	**0.0567**	**767.4510**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7852	7.9411	7.5704	0.0164		0.3106	0.3106		0.2875	0.2875		1,563.7048	1,563.7048	0.4893		1,575.9373
Paving	0.0467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8318**	**7.9411**	**7.5704**	**0.0164**		**0.3106**	**0.3106**		**0.2875**	**0.2875**		**1,563.7048**	**1,563.7048**	**0.4893**		**1,575.9373**

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	0.0388	0.0249	0.4266	1.2400e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		127.4579	127.4579	2.8200e-003	2.7400e-003	128.3437
Total	**0.0388**	**0.0249**	**0.4266**	**1.2400e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**127.4579**	**127.4579**	**2.8200e-003**	**2.7400e-003**	**128.3437**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7852	7.9411	7.5704	0.0164		0.3106	0.3106		0.2875	0.2875	0.0000	1,563.7048	1,563.7048	0.4893		1,575.9373
Paving	0.0467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8318**	**7.9411**	**7.5704**	**0.0164**		**0.3106**	**0.3106**		**0.2875**	**0.2875**	**0.0000**	**1,563.7048**	**1,563.7048**	**0.4893**		**1,575.9373**

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	0.0388	0.0249	0.4266	1.2400e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		127.4579	127.4579	2.8200e-003	2.7400e-003	128.3437
Total	**0.0388**	**0.0249**	**0.4266**	**1.2400e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**127.4579**	**127.4579**	**2.8200e-003**	**2.7400e-003**	**128.3437**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.6 Architectural Coating - 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					
Archit. Coating	4.1771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6421	6.3068	7.7615	0.0171		0.2611	0.2611		0.2501	0.2501		1,627.1582	1,627.1582	0.3411		1,635.6860
Total	**4.8191**	**6.3068**	**7.7615**	**0.0171**		**0.2611**	**0.2611**		**0.2501**	**0.2501**		**1,627.1582**	**1,627.1582**	**0.3411**		**1,635.6860**

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	0.0269	0.0173	0.2953	8.6000e-004	0.1006	5.4000e-004	0.1011	0.0267	5.0000e-004	0.0272		88.2401	88.2401	1.9600e-003	1.8900e-003	88.8534
Total	**0.0269**	**0.0173**	**0.2953**	**8.6000e-004**	**0.1006**	**5.4000e-004**	**0.1011**	**0.0267**	**5.0000e-004**	**0.0272**		**88.2401**	**88.2401**	**1.9600e-003**	**1.8900e-003**	**88.8534**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	4.1771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6421	6.3068	7.7615	0.0171		0.2611	0.2611		0.2501	0.2501	0.0000	1,627.1582	1,627.1582	0.3411		1,635.6860
Total	**4.8191**	**6.3068**	**7.7615**	**0.0171**		**0.2611**	**0.2611**		**0.2501**	**0.2501**	**0.0000**	**1,627.1582**	**1,627.1582**	**0.3411**		**1,635.6860**

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	0.0269	0.0173	0.2953	8.6000e-004	0.1006	5.4000e-004	0.1011	0.0267	5.0000e-004	0.0272		88.2401	88.2401	1.9600e-003	1.8900e-003	88.8534
Total	**0.0269**	**0.0173**	**0.2953**	**8.6000e-004**	**0.1006**	**5.4000e-004**	**0.1011**	**0.0267**	**5.0000e-004**	**0.0272**		**88.2401**	**88.2401**	**1.9600e-003**	**1.8900e-003**	**88.8534**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8540	2.5695	23.6830	0.0494	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		5,118.8407	5,118.8407	0.3542	0.2314	5,196.6393
Unmitigated	2.8540	2.5695	23.6830	0.0494	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		5,118.8407	5,118.8407	0.3542	0.2314	5,196.6393

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	1,232.24	0.00	0.00	1,730,067	1,730,067
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,232.24	0.00	0.00	1,730,067	1,730,067

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
Elementary School	11.97	0.00	0.00	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	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 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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Other Asphalt Surfaces	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Other Non-Asphalt Surfaces	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Parking Lot	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721

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	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
NaturalGas Unmitigated	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	981.71	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		**0.0106**	**0.0963**	**0.0809**	**5.8000e-004**		**7.3100e-003**	**7.3100e-003**		**7.3100e-003**	**7.3100e-003**		**115.4953**	**115.4953**	**2.2100e-003**	**2.1200e-003**	**116.1816**

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	0.98171	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		**0.0106**	**0.0963**	**0.0809**	**5.8000e-004**		**7.3100e-003**	**7.3100e-003**		**7.3100e-003**	**7.3100e-003**		**115.4953**	**115.4953**	**2.2100e-003**	**2.1200e-003**	**116.1816**

6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Unmitigated	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305

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	0.0492					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Total	**0.7622**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0286**	**0.0286**	**7.0000e-005**		**0.0305**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Summer

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0492					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Total	**0.7622**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0286**	**0.0286**	**7.0000e-005**		**0.0305**

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 Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

Valor Elementary School Project - AQGHG

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	34.76	1000sqft	0.54	34,755.00	0
Other Asphalt Surfaces	30.63	1000sqft	0.70	30,628.00	0
Other Non-Asphalt Surfaces	16.37	1000sqft	0.38	16,366.00	0
Parking Lot	49.00	Space	0.44	19,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2024
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	691.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Adjusted acreage to match project description and site plan total lot acreage.

Construction Phase - Construction Schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Trips and VMT - Based on applicant provided information

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

Grading - Based on applicant provided information

Architectural Coating - Based on SCAQMD Rule 1113

Vehicle Trips - Based on Linscott, Law & Greenspan, Engineers daily vehicle trips and VMT Transportation Assessment

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on SCAQMD Rule 1113

Water And Wastewater - No Septic tanks for the proposed project.

Solid Waste -

Construction Off-road Equipment Mitigation - Based on information provided by the applicant

Area Mitigation -

Waste Mitigation - The City of Los Angeles has achieved a soild waste diversion rate of 76 percent, reduced the soild waste generation rate by 26

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	10
tblConstructionPhase	NumDays	3.00	283.00
tblConstructionPhase	NumDays	6.00	43.00
tblConstructionPhase	NumDays	220.00	195.00
tblConstructionPhase	NumDays	10.00	64.00
tblConstructionPhase	NumDays	10.00	43.00
tblGrading	MaterialExported	0.00	2,500.00
tblLandUse	LandUseSquareFeet	34,760.00	34,755.00
tblLandUse	LandUseSquareFeet	30,630.00	30,628.00
tblLandUse	LandUseSquareFeet	16,370.00	16,366.00
tblLandUse	LotAcreage	0.80	0.54

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

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	HaulingTripNumber	247.00	250.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	11.97
tblVehicleTrips	WD_TR	19.52	35.45
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.1301	58.0644	55.2617	0.1277	9.2590	2.4952	11.7542	3.8386	2.3360	6.1745	0.0000	12,343.7767	12,343.7767	2.9751	0.1259	12,455.6741
2024	9.3934	48.8205	54.2121	0.1204	2.1083	2.0642	4.1724	0.3949	1.9354	2.3302	0.0000	11,577.2079	11,577.2079	2.7987	0.0665	11,662.9957
Maximum	**9.3934**	**58.0644**	**55.2617**	**0.1277**	**9.2590**	**2.4952**	**11.7542**	**3.8386**	**2.3360**	**6.1745**	**0.0000**	**12,343.7767**	**12,343.7767**	**2.9751**	**0.1259**	**12,455.6741**

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	6.1301	58.0644	55.2617	0.1277	9.2590	2.4952	11.7542	3.8386	2.3360	6.1745	0.0000	12,343.7767	12,343.7767	2.9751	0.1259	12,455.6741
2024	9.3934	48.8205	54.2121	0.1204	2.1083	2.0642	4.1724	0.3949	1.9354	2.3302	0.0000	11,577.2079	11,577.2079	2.7987	0.0665	11,662.9957
Maximum	**9.3934**	**58.0644**	**55.2617**	**0.1277**	**9.2590**	**2.4952**	**11.7542**	**3.8386**	**2.3360**	**6.1745**	**0.0000**	**12,343.7767**	**12,343.7767**	**2.9751**	**0.1259**	**12,455.6741**

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

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

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Energy	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Mobile	2.7194	2.7612	23.3499	0.0471	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		4,885.7006	4,885.7006	0.3698	0.2409	4,966.7275
Total	**3.4922**	**2.8576**	**23.4441**	**0.0477**	**5.1034**	**0.0438**	**5.1472**	**1.3600**	**0.0412**	**1.4012**		**5,001.2245**	**5,001.2245**	**0.3721**	**0.2430**	**5,082.9395**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Energy	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Mobile	2.7194	2.7612	23.3499	0.0471	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		4,885.7006	4,885.7006	0.3698	0.2409	4,966.7275
Total	**3.4922**	**2.8576**	**23.4441**	**0.0477**	**5.1034**	**0.0438**	**5.1472**	**1.3600**	**0.0412**	**1.4012**		**5,001.2245**	**5,001.2245**	**0.3721**	**0.2430**	**5,082.9395**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	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	Site Preparation	Site Preparation	9/1/2023	10/1/2024	5	283	
2	Grading	Grading	9/1/2023	10/31/2023	5	43	
3	Building Construction	Building Construction	10/2/2023	6/28/2024	5	195	
4	Paving	Paving	2/1/2024	4/30/2024	5	64	
5	Architectural Coating	Architectural Coating	6/3/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 283

Acres of Grading (Grading Phase): 43

Acres of Paving: 1.52

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,133; Non-Residential Outdoor: 17,378; Striped Parking Area: 3,996 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Bore/Drill Rigs	1	8.00	221	0.50
Site Preparation	Cement and Mortar Mixers	1	8.00	9	0.56
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Graders	1	8.00	187	0.41

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

Site Preparation	Pressure Washers	1	8.00	13	0.30
Site Preparation	Rollers	1	8.00	80	0.38
Site Preparation	Scrapers	0	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	1	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	8.00	9	0.56
Paving	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Pressure Washers	1	8.00	13	0.30
Paving	Rollers	0	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	8.00	63	0.31

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

Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Forklifts	1	8.00	89	0.20
Architectural Coating	Generator Sets	1	8.00	84	0.74
Architectural Coating	Pressure Washers	1	8.00	13	0.30
Architectural Coating	Surfacing Equipment	1	8.00	263	0.30

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
Site Preparation	11	28.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	11	43.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	5	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

3.2 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					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.4317	24.1478	21.7831	0.0481		1.0923	1.0923		1.0173	1.0173		4,605.9742	4,605.9742	1.3072		4,638.6550
Total	**2.4317**	**24.1478**	**21.7831**	**0.0481**	**1.0605**	**1.0923**	**2.1528**	**0.1145**	**1.0173**	**1.1318**		**4,605.9742**	**4,605.9742**	**1.3072**		**4,638.6550**

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	0.0944	0.0657	0.8913	2.5800e-003	0.3130	1.7600e-003	0.3147	0.0830	1.6200e-003	0.0846		264.2777	264.2777	6.8100e-003	6.7100e-003	266.4484
Total	**0.0944**	**0.0657**	**0.8913**	**2.5800e-003**	**0.3130**	**1.7600e-003**	**0.3147**	**0.0830**	**1.6200e-003**	**0.0846**		**264.2777**	**264.2777**	**6.8100e-003**	**6.7100e-003**	**266.4484**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

3.2 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	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.4317	24.1478	21.7831	0.0481		1.0923	1.0923		1.0173	1.0173	0.0000	4,605.9742	4,605.9742	1.3072		4,638.6550
Total	**2.4317**	**24.1478**	**21.7831**	**0.0481**	**1.0605**	**1.0923**	**2.1528**	**0.1145**	**1.0173**	**1.1318**	**0.0000**	**4,605.9742**	**4,605.9742**	**1.3072**		**4,638.6550**

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	0.0944	0.0657	0.8913	2.5800e-003	0.3130	1.7600e-003	0.3147	0.0830	1.6200e-003	0.0846		264.2777	264.2777	6.8100e-003	6.7100e-003	266.4484
Total	**0.0944**	**0.0657**	**0.8913**	**2.5800e-003**	**0.3130**	**1.7600e-003**	**0.3147**	**0.0830**	**1.6200e-003**	**0.0846**		**264.2777**	**264.2777**	**6.8100e-003**	**6.7100e-003**	**266.4484**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.3207	22.5043	21.7160	0.0481		1.0037	1.0037		0.9344	0.9344		4,608.4556	4,608.4556	1.3070		4,641.1304
Total	**2.3207**	**22.5043**	**21.7160**	**0.0481**	**1.0605**	**1.0037**	**2.0642**	**0.1145**	**0.9344**	**1.0489**		**4,608.4556**	**4,608.4556**	**1.3070**		**4,641.1304**

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	0.0884	0.0587	0.8318	2.5100e-003	0.3130	1.6900e-003	0.3147	0.0830	1.5500e-003	0.0846		258.6026	258.6026	6.1700e-003	6.2500e-003	260.6186
Total	**0.0884**	**0.0587**	**0.8318**	**2.5100e-003**	**0.3130**	**1.6900e-003**	**0.3147**	**0.0830**	**1.5500e-003**	**0.0846**		**258.6026**	**258.6026**	**6.1700e-003**	**6.2500e-003**	**260.6186**

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

3.2 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.3207	22.5043	21.7160	0.0481		1.0037	1.0037		0.9344	0.9344	0.0000	4,608.4556	4,608.4556	1.3070		4,641.1304
Total	**2.3207**	**22.5043**	**21.7160**	**0.0481**	**1.0605**	**1.0037**	**2.0642**	**0.1145**	**0.9344**	**1.0489**	**0.0000**	**4,608.4556**	**4,608.4556**	**1.3070**		**4,641.1304**

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	0.0884	0.0587	0.8318	2.5100e-003	0.3130	1.6900e-003	0.3147	0.0830	1.5500e-003	0.0846		258.6026	258.6026	6.1700e-003	6.2500e-003	260.6186
Total	**0.0884**	**0.0587**	**0.8318**	**2.5100e-003**	**0.3130**	**1.6900e-003**	**0.3147**	**0.0830**	**1.5500e-003**	**0.0846**		**258.6026**	**258.6026**	**6.1700e-003**	**6.2500e-003**	**260.6186**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.2969	13.5801	8.2672	0.0208		0.5573	0.5573		0.5135	0.5135		2,002.4409	2,002.4409	0.6401		2,018.4424
Total	**1.2969**	**13.5801**	**8.2672**	**0.0208**	**7.0826**	**0.5573**	**7.6398**	**3.4247**	**0.5135**	**3.9382**		**2,002.4409**	**2,002.4409**	**0.6401**		**2,018.4424**

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	0.0117	0.7337	0.1998	3.3300e-003	0.1017	5.3200e-003	0.1070	0.0279	5.0900e-003	0.0330		365.7956	365.7956	0.0203	0.0581	383.6206
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	0.0337	0.0235	0.3183	9.2000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		94.3849	94.3849	2.4300e-003	2.4000e-003	95.1601
Total	**0.0454**	**0.7572**	**0.5181**	**4.2500e-003**	**0.2135**	**5.9500e-003**	**0.2194**	**0.0575**	**5.6700e-003**	**0.0632**		**460.1805**	**460.1805**	**0.0227**	**0.0605**	**478.7807**

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

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.2969	13.5801	8.2672	0.0208		0.5573	0.5573		0.5135	0.5135	0.0000	2,002.4409	2,002.4409	0.6401		2,018.4424
Total	**1.2969**	**13.5801**	**8.2672**	**0.0208**	**7.0826**	**0.5573**	**7.6398**	**3.4247**	**0.5135**	**3.9382**	**0.0000**	**2,002.4409**	**2,002.4409**	**0.6401**		**2,018.4424**

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	0.0117	0.7337	0.1998	3.3300e-003	0.1017	5.3200e-003	0.1070	0.0279	5.0900e-003	0.0330		365.7956	365.7956	0.0203	0.0581	383.6206
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	0.0337	0.0235	0.3183	9.2000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		94.3849	94.3849	2.4300e-003	2.4000e-003	95.1601
Total	**0.0454**	**0.7572**	**0.5181**	**4.2500e-003**	**0.2135**	**5.9500e-003**	**0.2194**	**0.0575**	**5.6700e-003**	**0.0632**		**460.1805**	**460.1805**	**0.0227**	**0.0605**	**478.7807**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0987	18.7651	22.1825	0.0449		0.8317	0.8317		0.7920	0.7920		4,271.1933	4,271.1933	0.9767		4,295.6098
Total	**2.0987**	**18.7651**	**22.1825**	**0.0449**		**0.8317**	**0.8317**		**0.7920**	**0.7920**		**4,271.1933**	**4,271.1933**	**0.9767**		**4,295.6098**

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	0.0180	0.6477	0.2508	3.1000e-003	0.1089	3.6100e-003	0.1125	0.0313	3.4600e-003	0.0348		333.8551	333.8551	0.0112	0.0484	348.5492
Worker	0.1450	0.1008	1.3687	3.9700e-003	0.4806	2.7100e-003	0.4834	0.1275	2.4900e-003	0.1300		405.8551	405.8551	0.0105	0.0103	409.1886
Total	**0.1630**	**0.7485**	**1.6195**	**7.0700e-003**	**0.5895**	**6.3200e-003**	**0.5958**	**0.1588**	**5.9500e-003**	**0.1648**		**739.7102**	**739.7102**	**0.0216**	**0.0587**	**757.7378**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0987	18.7651	22.1825	0.0449		0.8317	0.8317		0.7920	0.7920	0.0000	4,271.1933	4,271.1933	0.9767		4,295.6098
Total	**2.0987**	**18.7651**	**22.1825**	**0.0449**		**0.8317**	**0.8317**		**0.7920**	**0.7920**	**0.0000**	**4,271.1933**	**4,271.1933**	**0.9767**		**4,295.6098**

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	0.0180	0.6477	0.2508	3.1000e-003	0.1089	3.6100e-003	0.1125	0.0313	3.4600e-003	0.0348		333.8551	333.8551	0.0112	0.0484	348.5492
Worker	0.1450	0.1008	1.3687	3.9700e-003	0.4806	2.7100e-003	0.4834	0.1275	2.4900e-003	0.1300		405.8551	405.8551	0.0105	0.0103	409.1886
Total	**0.1630**	**0.7485**	**1.6195**	**7.0700e-003**	**0.5895**	**6.3200e-003**	**0.5958**	**0.1588**	**5.9500e-003**	**0.1648**		**739.7102**	**739.7102**	**0.0216**	**0.0587**	**757.7378**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

3.4 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	1.9834	17.5484	22.1112	0.0450		0.7412	0.7412		0.7053	0.7053		4,273.6676	4,273.6676	0.9727		4,297.9854
Total	**1.9834**	**17.5484**	**22.1112**	**0.0450**		**0.7412**	**0.7412**		**0.7053**	**0.7053**		**4,273.6676**	**4,273.6676**	**0.9727**		**4,297.9854**

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	0.0175	0.6507	0.2467	3.0500e-003	0.1089	3.6200e-003	0.1125	0.0313	3.4600e-003	0.0348		329.0621	329.0621	0.0112	0.0478	343.5693
Worker	0.1358	0.0901	1.2774	3.8500e-003	0.4806	2.5900e-003	0.4832	0.1275	2.3900e-003	0.1299		397.1397	397.1397	9.4800e-003	9.5900e-003	400.2357
Total	**0.1533**	**0.7407**	**1.5241**	**6.9000e-003**	**0.5895**	**6.2100e-003**	**0.5957**	**0.1588**	**5.8500e-003**	**0.1647**		**726.2017**	**726.2017**	**0.0206**	**0.0573**	**743.8050**

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

3.4 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	lb/day										lb/day					
Off-Road	1.9834	17.5484	22.1112	0.0450		0.7412	0.7412		0.7053	0.7053	0.0000	4,273.6676	4,273.6676	0.9727		4,297.9854
Total	**1.9834**	**17.5484**	**22.1112**	**0.0450**		**0.7412**	**0.7412**		**0.7053**	**0.7053**	**0.0000**	**4,273.6676**	**4,273.6676**	**0.9727**		**4,297.9854**

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	0.0175	0.6507	0.2467	3.0500e-003	0.1089	3.6200e-003	0.1125	0.0313	3.4600e-003	0.0348		329.0621	329.0621	0.0112	0.0478	343.5693
Worker	0.1358	0.0901	1.2774	3.8500e-003	0.4806	2.5900e-003	0.4832	0.1275	2.3900e-003	0.1299		397.1397	397.1397	9.4800e-003	9.5900e-003	400.2357
Total	**0.1533**	**0.7407**	**1.5241**	**6.9000e-003**	**0.5895**	**6.2100e-003**	**0.5957**	**0.1588**	**5.8500e-003**	**0.1647**		**726.2017**	**726.2017**	**0.0206**	**0.0573**	**743.8050**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7852	7.9411	7.5704	0.0164		0.3106	0.3106		0.2875	0.2875		1,563.7048	1,563.7048	0.4893		1,575.9373
Paving	0.0467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8318**	**7.9411**	**7.5704**	**0.0164**		**0.3106**	**0.3106**		**0.2875**	**0.2875**		**1,563.7048**	**1,563.7048**	**0.4893**		**1,575.9373**

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	0.0411	0.0272	0.3862	1.1600e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		120.0655	120.0655	2.8700e-003	2.9000e-003	121.0015
Total	**0.0411**	**0.0272**	**0.3862**	**1.1600e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**120.0655**	**120.0655**	**2.8700e-003**	**2.9000e-003**	**121.0015**

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

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7852	7.9411	7.5704	0.0164		0.3106	0.3106		0.2875	0.2875	0.0000	1,563.7048	1,563.7048	0.4893		1,575.9373
Paving	0.0467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8318**	**7.9411**	**7.5704**	**0.0164**		**0.3106**	**0.3106**		**0.2875**	**0.2875**	**0.0000**	**1,563.7048**	**1,563.7048**	**0.4893**		**1,575.9373**

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	0.0411	0.0272	0.3862	1.1600e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		120.0655	120.0655	2.8700e-003	2.9000e-003	121.0015
Total	**0.0411**	**0.0272**	**0.3862**	**1.1600e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**120.0655**	**120.0655**	**2.8700e-003**	**2.9000e-003**	**121.0015**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

3.6 Architectural Coating - 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					
Archit. Coating	4.1771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6421	6.3068	7.7615	0.0171		0.2611	0.2611		0.2501	0.2501		1,627.1582	1,627.1582	0.3411		1,635.6860
Total	**4.8191**	**6.3068**	**7.7615**	**0.0171**		**0.2611**	**0.2611**		**0.2501**	**0.2501**		**1,627.1582**	**1,627.1582**	**0.3411**		**1,635.6860**

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	0.0284	0.0189	0.2674	8.1000e-004	0.1006	5.4000e-004	0.1011	0.0267	5.0000e-004	0.0272		83.1223	83.1223	1.9800e-003	2.0100e-003	83.7703
Total	**0.0284**	**0.0189**	**0.2674**	**8.1000e-004**	**0.1006**	**5.4000e-004**	**0.1011**	**0.0267**	**5.0000e-004**	**0.0272**		**83.1223**	**83.1223**	**1.9800e-003**	**2.0100e-003**	**83.7703**

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	4.1771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6421	6.3068	7.7615	0.0171		0.2611	0.2611		0.2501	0.2501	0.0000	1,627.1582	1,627.1582	0.3411		1,635.6860
Total	**4.8191**	**6.3068**	**7.7615**	**0.0171**		**0.2611**	**0.2611**		**0.2501**	**0.2501**	**0.0000**	**1,627.1582**	**1,627.1582**	**0.3411**		**1,635.6860**

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	0.0284	0.0189	0.2674	8.1000e-004	0.1006	5.4000e-004	0.1011	0.0267	5.0000e-004	0.0272		83.1223	83.1223	1.9800e-003	2.0100e-003	83.7703
Total	**0.0284**	**0.0189**	**0.2674**	**8.1000e-004**	**0.1006**	**5.4000e-004**	**0.1011**	**0.0267**	**5.0000e-004**	**0.0272**		**83.1223**	**83.1223**	**1.9800e-003**	**2.0100e-003**	**83.7703**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7194	2.7612	23.3499	0.0471	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		4,885.7006	4,885.7006	0.3698	0.2409	4,966.7275
Unmitigated	2.7194	2.7612	23.3499	0.0471	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		4,885.7006	4,885.7006	0.3698	0.2409	4,966.7275

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	1,232.24	0.00	0.00	1,730,067	1,730,067
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,232.24	0.00	0.00	1,730,067	1,730,067

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
Elementary School	11.97	0.00	0.00	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	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 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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Other Asphalt Surfaces	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Other Non-Asphalt Surfaces	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Parking Lot	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721

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	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
NaturalGas Unmitigated	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	981.71	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		**0.0106**	**0.0963**	**0.0809**	**5.8000e-004**		**7.3100e-003**	**7.3100e-003**		**7.3100e-003**	**7.3100e-003**		**115.4953**	**115.4953**	**2.2100e-003**	**2.1200e-003**	**116.1816**

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	0.98171	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		**0.0106**	**0.0963**	**0.0809**	**5.8000e-004**		**7.3100e-003**	**7.3100e-003**		**7.3100e-003**	**7.3100e-003**		**115.4953**	**115.4953**	**2.2100e-003**	**2.1200e-003**	**116.1816**

6.0 Area Detail

6.1 Mitigation Measures Area

Valor Elementary School Project - AQGHG - South Coast AQMD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Unmitigated	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305

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	0.0492					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Total	**0.7622**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0286**	**0.0286**	**7.0000e-005**		**0.0305**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0492					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Total	**0.7622**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0286**	**0.0286**	**7.0000e-005**		**0.0305**

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 Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

Valor Elementary School Project - AQGHG - Mitigation

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	34.76	1000sqft	0.54	34,755.00	0
Other Asphalt Surfaces	30.63	1000sqft	0.70	30,628.00	0
Other Non-Asphalt Surfaces	16.37	1000sqft	0.38	16,366.00	0
Parking Lot	49.00	Space	0.44	19,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2024
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	691.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Adjusted acreage to match project description and site plan total lot acreage.

Construction Phase - Construction Schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Trips and VMT - Based on applicant provided information

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

Grading - Based on applicant provided information

Architectural Coating - Based on SCAQMD Rule 1113

Vehicle Trips - Based on Linscott, Law & Greenspan, Engineers daily vehicle trips and VMT Transportation Assessment

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on SCAQMD Rule 1113

Water And Wastewater - No Septic tanks for the proposed project.

Solid Waste -

Construction Off-road Equipment Mitigation - Based on SCAQMD Rule 403

Area Mitigation -

Waste Mitigation - The City of Los Angeles has achieved a soild waste diversion rate of 76 percent, reduced the soild waste generation rate by 26

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	10
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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
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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	3.00	283.00
tblConstructionPhase	NumDays	6.00	43.00
tblConstructionPhase	NumDays	220.00	195.00

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

tblConstructionPhase	NumDays	10.00	64.00
tblConstructionPhase	NumDays	10.00	43.00
tblGrading	MaterialExported	0.00	2,500.00
tblLandUse	LandUseSquareFeet	34,760.00	34,755.00
tblLandUse	LandUseSquareFeet	30,630.00	30,628.00
tblLandUse	LandUseSquareFeet	16,370.00	16,366.00
tblLandUse	LotAcreage	0.80	0.54
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	HaulingTripNumber	247.00	250.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	11.97
tblVehicleTrips	WD_TR	19.52	35.45
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.1173	57.9841	55.5217	0.1281	9.2590	2.4952	11.7542	3.8386	2.3359	6.1745	0.0000	12,389.8642	12,389.8642	2.9749	0.1246	12,501.3679
2024	9.3802	48.7747	54.4527	0.1208	2.1083	2.0641	4.1724	0.3949	1.9353	2.3302	0.0000	11,622.0960	11,622.0960	2.7984	0.0653	11,707.5388
Maximum	**9.3802**	**57.9841**	**55.5217**	**0.1281**	**9.2590**	**2.4952**	**11.7542**	**3.8386**	**2.3359**	**6.1745**	**0.0000**	**12,389.8642**	**12,389.8642**	**2.9749**	**0.1246**	**12,501.3679**

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	2.0764	10.9433	68.9245	0.1281	4.7803	0.2956	5.0759	1.8920	0.2948	2.1868	0.0000	12,389.8642	12,389.8642	2.9749	0.1246	12,501.3679
2024	6.1635	10.8200	67.7691	0.1208	1.5250	0.2866	1.8116	0.3319	0.2860	0.6179	0.0000	11,622.0960	11,622.0960	2.7984	0.0653	11,707.5387
Maximum	**6.1635**	**10.9433**	**68.9245**	**0.1281**	**4.7803**	**0.2956**	**5.0759**	**1.8920**	**0.2948**	**2.1868**	**0.0000**	**12,389.8642**	**12,389.8642**	**2.9749**	**0.1246**	**12,501.3679**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	46.83	79.61	-24.30	0.00	44.53	87.23	56.75	47.47	86.40	67.02	0.00	0.00	0.00	0.00	0.00	0.00

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Energy	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Mobile	2.8540	2.5695	23.6830	0.0494	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		5,118.8407	5,118.8407	0.3542	0.2314	5,196.6393
Total	**3.6267**	**2.6659**	**23.7772**	**0.0500**	**5.1034**	**0.0437**	**5.1472**	**1.3600**	**0.0412**	**1.4011**		**5,234.3646**	**5,234.3646**	**0.3565**	**0.2335**	**5,312.8514**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Energy	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Mobile	2.8540	2.5695	23.6830	0.0494	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		5,118.8407	5,118.8407	0.3542	0.2314	5,196.6393
Total	**3.6267**	**2.6659**	**23.7772**	**0.0500**	**5.1034**	**0.0437**	**5.1472**	**1.3600**	**0.0412**	**1.4011**		**5,234.3646**	**5,234.3646**	**0.3565**	**0.2335**	**5,312.8514**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2023	10/1/2024	5	283	
2	Grading	Grading	9/1/2023	10/31/2023	5	43	
3	Building Construction	Building Construction	10/2/2023	6/28/2024	5	195	
4	Paving	Paving	2/1/2024	4/30/2024	5	64	
5	Architectural Coating	Architectural Coating	6/3/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 283

Acres of Grading (Grading Phase): 43

Acres of Paving: 1.52

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,133; Non-Residential Outdoor: 17,378; Striped Parking Area: 3,996 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Bore/Drill Rigs	1	8.00	221	0.50
Site Preparation	Cement and Mortar Mixers	1	8.00	9	0.56
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Graders	1	8.00	187	0.41

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

Site Preparation	Pressure Washers	1	8.00	13	0.30
Site Preparation	Rollers	1	8.00	80	0.38
Site Preparation	Scrapers	0	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	1	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	8.00	9	0.56
Paving	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Pressure Washers	1	8.00	13	0.30
Paving	Rollers	0	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	8.00	63	0.31

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

Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Forklifts	1	8.00	89	0.20
Architectural Coating	Generator Sets	1	8.00	84	0.74
Architectural Coating	Pressure Washers	1	8.00	13	0.30
Architectural Coating	Surfacing Equipment	1	8.00	263	0.30

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
Site Preparation	11	28.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	11	43.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	5	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

3.2 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					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.4317	24.1478	21.7831	0.0481		1.0923	1.0923		1.0173	1.0173		4,605.9742	4,605.9742	1.3072		4,638.6550
Total	**2.4317**	**24.1478**	**21.7831**	**0.0481**	**1.0605**	**1.0923**	**2.1528**	**0.1145**	**1.0173**	**1.1318**		**4,605.9742**	**4,605.9742**	**1.3072**		**4,638.6550**

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	0.0894	0.0600	0.9849	2.7400e-003	0.3130	1.7600e-003	0.3147	0.0830	1.6200e-003	0.0846		280.5598	280.5598	6.7200e-003	6.3300e-003	282.6136
Total	**0.0894**	**0.0600**	**0.9849**	**2.7400e-003**	**0.3130**	**1.7600e-003**	**0.3147**	**0.0830**	**1.6200e-003**	**0.0846**		**280.5598**	**280.5598**	**6.7200e-003**	**6.3300e-003**	**282.6136**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

3.2 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	lb/day										lb/day					
Fugitive Dust					0.4772	0.0000	0.4772	0.0515	0.0000	0.0515			0.0000			0.0000
Off-Road	0.6618	3.0961	27.7533	0.0481		0.1018	0.1018		0.1018	0.1018	0.0000	4,605.9742	4,605.9742	1.3072		4,638.6550
Total	**0.6618**	**3.0961**	**27.7533**	**0.0481**	**0.4772**	**0.1018**	**0.5791**	**0.0515**	**0.1018**	**0.1534**	**0.0000**	**4,605.9742**	**4,605.9742**	**1.3072**		**4,638.6550**

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	0.0894	0.0600	0.9849	2.7400e-003	0.3130	1.7600e-003	0.3147	0.0830	1.6200e-003	0.0846		280.5598	280.5598	6.7200e-003	6.3300e-003	282.6136
Total	**0.0894**	**0.0600**	**0.9849**	**2.7400e-003**	**0.3130**	**1.7600e-003**	**0.3147**	**0.0830**	**1.6200e-003**	**0.0846**		**280.5598**	**280.5598**	**6.7200e-003**	**6.3300e-003**	**282.6136**

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

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.3207	22.5043	21.7160	0.0481		1.0037	1.0037		0.9344	0.9344		4,608.4556	4,608.4556	1.3070		4,641.1304
Total	**2.3207**	**22.5043**	**21.7160**	**0.0481**	**1.0605**	**1.0037**	**2.0642**	**0.1145**	**0.9344**	**1.0489**		**4,608.4556**	**4,608.4556**	**1.3070**		**4,641.1304**

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	0.0835	0.0537	0.9187	2.6600e-003	0.3130	1.6900e-003	0.3147	0.0830	1.5500e-003	0.0846		274.5247	274.5247	6.0800e-003	5.8900e-003	276.4326
Total	**0.0835**	**0.0537**	**0.9187**	**2.6600e-003**	**0.3130**	**1.6900e-003**	**0.3147**	**0.0830**	**1.5500e-003**	**0.0846**		**274.5247**	**274.5247**	**6.0800e-003**	**5.8900e-003**	**276.4326**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

3.2 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4772	0.0000	0.4772	0.0515	0.0000	0.0515			0.0000			0.0000
Off-Road	0.6614	3.0933	27.7527	0.0481		0.1015	0.1015		0.1015	0.1015	0.0000	4,608.4556	4,608.4556	1.3070		4,641.1304
Total	**0.6614**	**3.0933**	**27.7527**	**0.0481**	**0.4772**	**0.1015**	**0.5787**	**0.0515**	**0.1015**	**0.1530**	**0.0000**	**4,608.4556**	**4,608.4556**	**1.3070**		**4,641.1304**

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	0.0835	0.0537	0.9187	2.6600e-003	0.3130	1.6900e-003	0.3147	0.0830	1.5500e-003	0.0846		274.5247	274.5247	6.0800e-003	5.8900e-003	276.4326
Total	**0.0835**	**0.0537**	**0.9187**	**2.6600e-003**	**0.3130**	**1.6900e-003**	**0.3147**	**0.0830**	**1.5500e-003**	**0.0846**		**274.5247**	**274.5247**	**6.0800e-003**	**5.8900e-003**	**276.4326**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.2969	13.5801	8.2672	0.0208		0.5573	0.5573		0.5135	0.5135		2,002.4409	2,002.4409	0.6401		2,018.4424
Total	**1.2969**	**13.5801**	**8.2672**	**0.0208**	**7.0826**	**0.5573**	**7.6398**	**3.4247**	**0.5135**	**3.9382**		**2,002.4409**	**2,002.4409**	**0.6401**		**2,018.4424**

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	0.0125	0.7003	0.1970	3.3200e-003	0.1017	5.3100e-003	0.1070	0.0279	5.0800e-003	0.0330		365.3840	365.3840	0.0203	0.0581	383.1904
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	0.0319	0.0214	0.3517	9.8000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		100.1999	100.1999	2.4000e-003	2.2600e-003	100.9334
Total	**0.0445**	**0.7218**	**0.5487**	**4.3000e-003**	**0.2135**	**5.9400e-003**	**0.2194**	**0.0575**	**5.6600e-003**	**0.0632**		**465.5839**	**465.5839**	**0.0227**	**0.0603**	**484.1238**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	0.2893	1.3313	10.9370	0.0208		0.0430	0.0430		0.0430	0.0430	0.0000	2,002.4409	2,002.4409	0.6401		2,018.4424
Total	**0.2893**	**1.3313**	**10.9370**	**0.0208**	**3.1872**	**0.0430**	**3.2302**	**1.5411**	**0.0430**	**1.5841**	**0.0000**	**2,002.4409**	**2,002.4409**	**0.6401**		**2,018.4424**

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	0.0125	0.7003	0.1970	3.3200e-003	0.1017	5.3100e-003	0.1070	0.0279	5.0800e-003	0.0330		365.3840	365.3840	0.0203	0.0581	383.1904
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	0.0319	0.0214	0.3517	9.8000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		100.1999	100.1999	2.4000e-003	2.2600e-003	100.9334
Total	**0.0445**	**0.7218**	**0.5487**	**4.3000e-003**	**0.2135**	**5.9400e-003**	**0.2194**	**0.0575**	**5.6600e-003**	**0.0632**		**465.5839**	**465.5839**	**0.0227**	**0.0603**	**484.1238**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0987	18.7651	22.1825	0.0449		0.8317	0.8317		0.7920	0.7920		4,271.1933	4,271.1933	0.9767		4,295.6098
Total	**2.0987**	**18.7651**	**22.1825**	**0.0449**		**0.8317**	**0.8317**		**0.7920**	**0.7920**		**4,271.1933**	**4,271.1933**	**0.9767**		**4,295.6098**

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	0.0188	0.6171	0.2430	3.0900e-003	0.1089	3.5900e-003	0.1125	0.0313	3.4400e-003	0.0348		333.2526	333.2526	0.0112	0.0482	347.9095
Worker	0.1374	0.0922	1.5125	4.2100e-003	0.4806	2.7100e-003	0.4834	0.1275	2.4900e-003	0.1300		430.8596	430.8596	0.0103	9.7200e-003	434.0138
Total	**0.1562**	**0.7093**	**1.7554**	**7.3000e-003**	**0.5895**	**6.3000e-003**	**0.5958**	**0.1588**	**5.9300e-003**	**0.1647**		**764.1122**	**764.1122**	**0.0215**	**0.0580**	**781.9233**

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

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8352	5.0249	26.9453	0.0449		0.1367	0.1367		0.1367	0.1367	0.0000	4,271.1933	4,271.1933	0.9767		4,295.6098
Total	**0.8352**	**5.0249**	**26.9453**	**0.0449**		**0.1367**	**0.1367**		**0.1367**	**0.1367**	**0.0000**	**4,271.1933**	**4,271.1933**	**0.9767**		**4,295.6098**

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	0.0188	0.6171	0.2430	3.0900e-003	0.1089	3.5900e-003	0.1125	0.0313	3.4400e-003	0.0348		333.2526	333.2526	0.0112	0.0482	347.9095
Worker	0.1374	0.0922	1.5125	4.2100e-003	0.4806	2.7100e-003	0.4834	0.1275	2.4900e-003	0.1300		430.8596	430.8596	0.0103	9.7200e-003	434.0138
Total	**0.1562**	**0.7093**	**1.7554**	**7.3000e-003**	**0.5895**	**6.3000e-003**	**0.5958**	**0.1588**	**5.9300e-003**	**0.1647**		**764.1122**	**764.1122**	**0.0215**	**0.0580**	**781.9233**

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

3.4 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	1.9834	17.5484	22.1112	0.0450		0.7412	0.7412		0.7053	0.7053		4,273.6676	4,273.6676	0.9727		4,297.9854
Total	**1.9834**	**17.5484**	**22.1112**	**0.0450**		**0.7412**	**0.7412**		**0.7053**	**0.7053**		**4,273.6676**	**4,273.6676**	**0.9727**		**4,297.9854**

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	0.0184	0.6199	0.2390	3.0500e-003	0.1089	3.6000e-003	0.1125	0.0313	3.4500e-003	0.0348		328.4584	328.4584	0.0112	0.0476	342.9294
Worker	0.1283	0.0824	1.4109	4.0900e-003	0.4806	2.5900e-003	0.4832	0.1275	2.3900e-003	0.1299		421.5915	421.5915	9.3400e-003	9.0500e-003	424.5215
Total	**0.1466**	**0.7023**	**1.6499**	**7.1400e-003**	**0.5895**	**6.1900e-003**	**0.5957**	**0.1588**	**5.8400e-003**	**0.1647**		**750.0499**	**750.0499**	**0.0205**	**0.0567**	**767.4510**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

3.4 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	lb/day										lb/day					
Off-Road	0.8166	4.9851	26.9311	0.0450		0.1290	0.1290		0.1290	0.1290	0.0000	4,273.6676	4,273.6676	0.9727		4,297.9854
Total	**0.8166**	**4.9851**	**26.9311**	**0.0450**		**0.1290**	**0.1290**		**0.1290**	**0.1290**	**0.0000**	**4,273.6676**	**4,273.6676**	**0.9727**		**4,297.9854**

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	0.0184	0.6199	0.2390	3.0500e-003	0.1089	3.6000e-003	0.1125	0.0313	3.4500e-003	0.0348		328.4584	328.4584	0.0112	0.0476	342.9294
Worker	0.1283	0.0824	1.4109	4.0900e-003	0.4806	2.5900e-003	0.4832	0.1275	2.3900e-003	0.1299		421.5915	421.5915	9.3400e-003	9.0500e-003	424.5215
Total	**0.1466**	**0.7023**	**1.6499**	**7.1400e-003**	**0.5895**	**6.1900e-003**	**0.5957**	**0.1588**	**5.8400e-003**	**0.1647**		**750.0499**	**750.0499**	**0.0205**	**0.0567**	**767.4510**

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

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7852	7.9411	7.5704	0.0164		0.3106	0.3106		0.2875	0.2875		1,563.7048	1,563.7048	0.4893		1,575.9373
Paving	0.0467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8318**	**7.9411**	**7.5704**	**0.0164**		**0.3106**	**0.3106**		**0.2875**	**0.2875**		**1,563.7048**	**1,563.7048**	**0.4893**		**1,575.9373**

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	0.0388	0.0249	0.4266	1.2400e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		127.4579	127.4579	2.8200e-003	2.7400e-003	128.3437
Total	**0.0388**	**0.0249**	**0.4266**	**1.2400e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**127.4579**	**127.4579**	**2.8200e-003**	**2.7400e-003**	**128.3437**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2714	1.3673	10.0901	0.0164		0.0474	0.0474		0.0474	0.0474	0.0000	1,563.7048	1,563.7048	0.4893		1,575.9373
Paving	0.0467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3181**	**1.3673**	**10.0901**	**0.0164**		**0.0474**	**0.0474**		**0.0474**	**0.0474**	**0.0000**	**1,563.7048**	**1,563.7048**	**0.4893**		**1,575.9373**

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	0.0388	0.0249	0.4266	1.2400e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		127.4579	127.4579	2.8200e-003	2.7400e-003	128.3437
Total	**0.0388**	**0.0249**	**0.4266**	**1.2400e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**127.4579**	**127.4579**	**2.8200e-003**	**2.7400e-003**	**128.3437**

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

3.6 Architectural Coating - 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					
Archit. Coating	4.1771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6421	6.3068	7.7615	0.0171		0.2611	0.2611		0.2501	0.2501		1,627.1582	1,627.1582	0.3411		1,635.6860
Total	**4.8191**	**6.3068**	**7.7615**	**0.0171**		**0.2611**	**0.2611**		**0.2501**	**0.2501**		**1,627.1582**	**1,627.1582**	**0.3411**		**1,635.6860**

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	0.0269	0.0173	0.2953	8.6000e-004	0.1006	5.4000e-004	0.1011	0.0267	5.0000e-004	0.0272		88.2401	88.2401	1.9600e-003	1.8900e-003	88.8534
Total	**0.0269**	**0.0173**	**0.2953**	**8.6000e-004**	**0.1006**	**5.4000e-004**	**0.1011**	**0.0267**	**5.0000e-004**	**0.0272**		**88.2401**	**88.2401**	**1.9600e-003**	**1.8900e-003**	**88.8534**

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

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	4.1771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2515	1.9684	9.7945	0.0171		0.0376	0.0376		0.0376	0.0376	0.0000	1,627.1582	1,627.1582	0.3411		1,635.6860
Total	**4.4286**	**1.9684**	**9.7945**	**0.0171**		**0.0376**	**0.0376**		**0.0376**	**0.0376**	**0.0000**	**1,627.1582**	**1,627.1582**	**0.3411**		**1,635.6860**

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	0.0269	0.0173	0.2953	8.6000e-004	0.1006	5.4000e-004	0.1011	0.0267	5.0000e-004	0.0272		88.2401	88.2401	1.9600e-003	1.8900e-003	88.8534
Total	**0.0269**	**0.0173**	**0.2953**	**8.6000e-004**	**0.1006**	**5.4000e-004**	**0.1011**	**0.0267**	**5.0000e-004**	**0.0272**		**88.2401**	**88.2401**	**1.9600e-003**	**1.8900e-003**	**88.8534**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8540	2.5695	23.6830	0.0494	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		5,118.8407	5,118.8407	0.3542	0.2314	5,196.6393
Unmitigated	2.8540	2.5695	23.6830	0.0494	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		5,118.8407	5,118.8407	0.3542	0.2314	5,196.6393

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	1,232.24	0.00	0.00	1,730,067	1,730,067
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,232.24	0.00	0.00	1,730,067	1,730,067

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
Elementary School	11.97	0.00	0.00	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	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 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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Other Asphalt Surfaces	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Other Non-Asphalt Surfaces	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Parking Lot	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721

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	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
NaturalGas Unmitigated	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	981.71	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		**0.0106**	**0.0963**	**0.0809**	**5.8000e-004**		**7.3100e-003**	**7.3100e-003**		**7.3100e-003**	**7.3100e-003**		**115.4953**	**115.4953**	**2.2100e-003**	**2.1200e-003**	**116.1816**

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	0.98171	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		**0.0106**	**0.0963**	**0.0809**	**5.8000e-004**		**7.3100e-003**	**7.3100e-003**		**7.3100e-003**	**7.3100e-003**		**115.4953**	**115.4953**	**2.2100e-003**	**2.1200e-003**	**116.1816**

6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Unmitigated	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305

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	0.0492					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Total	**0.7622**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0286**	**0.0286**	**7.0000e-005**		**0.0305**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Summer

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0492					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Total	**0.7622**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0286**	**0.0286**	**7.0000e-005**		**0.0305**

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 Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

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

Valor Elementary School Project - AQGHG - Mitigation

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	34.76	1000sqft	0.54	34,755.00	0
Other Asphalt Surfaces	30.63	1000sqft	0.70	30,628.00	0
Other Non-Asphalt Surfaces	16.37	1000sqft	0.38	16,366.00	0
Parking Lot	49.00	Space	0.44	19,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	12			**Operational Year**	2024
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	691.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Adjusted acreage to match project description and site plan total lot acreage.

Construction Phase - Construction Schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Off-road Equipment - Construction schedule provided by the applicant

Trips and VMT - Based on applicant provided information

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

Grading - Based on applicant provided information

Architectural Coating - Based on SCAQMD Rule 1113

Vehicle Trips - Based on Linscott, Law & Greenspan, Engineers daily vehicle trips and VMT Transportation Assessment

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on SCAQMD Rule 1113

Water And Wastewater - No Septic tanks for the proposed project.

Solid Waste -

Construction Off-road Equipment Mitigation - Based on SCAQMD Rule 403

Area Mitigation -

Waste Mitigation - The City of Los Angeles has achieved a soild waste diversion rate of 76 percent, reduced the soild waste generation rate by 26

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	10
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	3.00	283.00
tblConstructionPhase	NumDays	6.00	43.00
tblConstructionPhase	NumDays	220.00	195.00

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

tblConstructionPhase	NumDays	10.00	64.00
tblConstructionPhase	NumDays	10.00	43.00
tblGrading	MaterialExported	0.00	2,500.00
tblLandUse	LandUseSquareFeet	34,760.00	34,755.00
tblLandUse	LandUseSquareFeet	30,630.00	30,628.00
tblLandUse	LandUseSquareFeet	16,370.00	16,366.00
tblLandUse	LotAcreage	0.80	0.54
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	HaulingTripNumber	247.00	250.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	11.97
tblVehicleTrips	WD_TR	19.52	35.45
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.1301	58.0644	55.2617	0.1277	9.2590	2.4952	11.7542	3.8386	2.3360	6.1745	0.0000	12,343.7767	12,343.7767	2.9751	0.1259	12,455.6741
2024	9.3934	48.8205	54.2121	0.1204	2.1083	2.0642	4.1724	0.3949	1.9354	2.3302	0.0000	11,577.2079	11,577.2079	2.7987	0.0665	11,662.9957
Maximum	**9.3934**	**58.0644**	**55.2617**	**0.1277**	**9.2590**	**2.4952**	**11.7542**	**3.8386**	**2.3360**	**6.1745**	**0.0000**	**12,343.7767**	**12,343.7767**	**2.9751**	**0.1259**	**12,455.6741**

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	2.0891	11.0236	68.6645	0.1277	4.7803	0.2956	5.0760	1.8920	0.2948	2.1868	0.0000	12,343.7767	12,343.7767	2.9751	0.1259	12,455.6741
2024	6.1767	10.8651	67.5160	0.1204	1.5250	0.2866	1.8116	0.3319	0.2860	0.6179	0.0000	11,577.2079	11,577.2079	2.7987	0.0665	11,662.9957
Maximum	**6.1767**	**11.0236**	**68.6645**	**0.1277**	**4.7803**	**0.2956**	**5.0760**	**1.8920**	**0.2948**	**2.1868**	**0.0000**	**12,343.7767**	**12,343.7767**	**2.9751**	**0.1259**	**12,455.6741**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	46.75	79.52	-24.40	0.00	44.53	87.23	56.75	47.47	86.40	67.02	0.00	0.00	0.00	0.00	0.00	0.00

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Energy	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Mobile	2.7194	2.7612	23.3499	0.0471	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		4,885.7006	4,885.7006	0.3698	0.2409	4,966.7275
Total	**3.4922**	**2.8576**	**23.4441**	**0.0477**	**5.1034**	**0.0438**	**5.1472**	**1.3600**	**0.0412**	**1.4012**		**5,001.2245**	**5,001.2245**	**0.3721**	**0.2430**	**5,082.9395**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Energy	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Mobile	2.7194	2.7612	23.3499	0.0471	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		4,885.7006	4,885.7006	0.3698	0.2409	4,966.7275
Total	**3.4922**	**2.8576**	**23.4441**	**0.0477**	**5.1034**	**0.0438**	**5.1472**	**1.3600**	**0.0412**	**1.4012**		**5,001.2245**	**5,001.2245**	**0.3721**	**0.2430**	**5,082.9395**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	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	Site Preparation	Site Preparation	9/1/2023	10/1/2024	5	283	
2	Grading	Grading	9/1/2023	10/31/2023	5	43	
3	Building Construction	Building Construction	10/2/2023	6/28/2024	5	195	
4	Paving	Paving	2/1/2024	4/30/2024	5	64	
5	Architectural Coating	Architectural Coating	6/3/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 283

Acres of Grading (Grading Phase): 43

Acres of Paving: 1.52

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,133; Non-Residential Outdoor: 17,378; Striped Parking Area: 3,996 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Bore/Drill Rigs	1	8.00	221	0.50
Site Preparation	Cement and Mortar Mixers	1	8.00	9	0.56
Site Preparation	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Crawler Tractors	1	8.00	212	0.43
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Graders	1	8.00	187	0.41

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

Site Preparation	Pressure Washers	1	8.00	13	0.30
Site Preparation	Rollers	1	8.00	80	0.38
Site Preparation	Scrapers	0	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Plate Compactors	1	8.00	8	0.43
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	1	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	8.00	9	0.56
Paving	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Plate Compactors	1	8.00	8	0.43
Paving	Pressure Washers	1	8.00	13	0.30
Paving	Rollers	0	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	8.00	63	0.31

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

Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Forklifts	1	8.00	89	0.20
Architectural Coating	Generator Sets	1	8.00	84	0.74
Architectural Coating	Pressure Washers	1	8.00	13	0.30
Architectural Coating	Surfacing Equipment	1	8.00	263	0.30

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
Site Preparation	11	28.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	250.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	11	43.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	5	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.2 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					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.4317	24.1478	21.7831	0.0481		1.0923	1.0923		1.0173	1.0173		4,605.9742	4,605.9742	1.3072		4,638.6550
Total	**2.4317**	**24.1478**	**21.7831**	**0.0481**	**1.0605**	**1.0923**	**2.1528**	**0.1145**	**1.0173**	**1.1318**		**4,605.9742**	**4,605.9742**	**1.3072**		**4,638.6550**

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	0.0944	0.0657	0.8913	2.5800e-003	0.3130	1.7600e-003	0.3147	0.0830	1.6200e-003	0.0846		264.2777	264.2777	6.8100e-003	6.7100e-003	266.4484
Total	**0.0944**	**0.0657**	**0.8913**	**2.5800e-003**	**0.3130**	**1.7600e-003**	**0.3147**	**0.0830**	**1.6200e-003**	**0.0846**		**264.2777**	**264.2777**	**6.8100e-003**	**6.7100e-003**	**266.4484**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.2 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	lb/day										lb/day					
Fugitive Dust					0.4772	0.0000	0.4772	0.0515	0.0000	0.0515			0.0000			0.0000
Off-Road	0.6618	3.0961	27.7533	0.0481		0.1018	0.1018		0.1018	0.1018	0.0000	4,605.9742	4,605.9742	1.3072		4,638.6550
Total	**0.6618**	**3.0961**	**27.7533**	**0.0481**	**0.4772**	**0.1018**	**0.5791**	**0.0515**	**0.1018**	**0.1534**	**0.0000**	**4,605.9742**	**4,605.9742**	**1.3072**		**4,638.6550**

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	0.0944	0.0657	0.8913	2.5800e-003	0.3130	1.7600e-003	0.3147	0.0830	1.6200e-003	0.0846		264.2777	264.2777	6.8100e-003	6.7100e-003	266.4484
Total	**0.0944**	**0.0657**	**0.8913**	**2.5800e-003**	**0.3130**	**1.7600e-003**	**0.3147**	**0.0830**	**1.6200e-003**	**0.0846**		**264.2777**	**264.2777**	**6.8100e-003**	**6.7100e-003**	**266.4484**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	2.3207	22.5043	21.7160	0.0481		1.0037	1.0037		0.9344	0.9344		4,608.4556	4,608.4556	1.3070		4,641.1304
Total	**2.3207**	**22.5043**	**21.7160**	**0.0481**	**1.0605**	**1.0037**	**2.0642**	**0.1145**	**0.9344**	**1.0489**		**4,608.4556**	**4,608.4556**	**1.3070**		**4,641.1304**

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	0.0884	0.0587	0.8318	2.5100e-003	0.3130	1.6900e-003	0.3147	0.0830	1.5500e-003	0.0846		258.6026	258.6026	6.1700e-003	6.2500e-003	260.6186
Total	**0.0884**	**0.0587**	**0.8318**	**2.5100e-003**	**0.3130**	**1.6900e-003**	**0.3147**	**0.0830**	**1.5500e-003**	**0.0846**		**258.6026**	**258.6026**	**6.1700e-003**	**6.2500e-003**	**260.6186**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.2 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4772	0.0000	0.4772	0.0515	0.0000	0.0515			0.0000			0.0000
Off-Road	0.6614	3.0933	27.7527	0.0481		0.1015	0.1015		0.1015	0.1015	0.0000	4,608.4556	4,608.4556	1.3070		4,641.1304
Total	**0.6614**	**3.0933**	**27.7527**	**0.0481**	**0.4772**	**0.1015**	**0.5787**	**0.0515**	**0.1015**	**0.1530**	**0.0000**	**4,608.4556**	**4,608.4556**	**1.3070**		**4,641.1304**

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	0.0884	0.0587	0.8318	2.5100e-003	0.3130	1.6900e-003	0.3147	0.0830	1.5500e-003	0.0846		258.6026	258.6026	6.1700e-003	6.2500e-003	260.6186
Total	**0.0884**	**0.0587**	**0.8318**	**2.5100e-003**	**0.3130**	**1.6900e-003**	**0.3147**	**0.0830**	**1.5500e-003**	**0.0846**		**258.6026**	**258.6026**	**6.1700e-003**	**6.2500e-003**	**260.6186**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.2969	13.5801	8.2672	0.0208		0.5573	0.5573		0.5135	0.5135		2,002.4409	2,002.4409	0.6401		2,018.4424
Total	**1.2969**	**13.5801**	**8.2672**	**0.0208**	**7.0826**	**0.5573**	**7.6398**	**3.4247**	**0.5135**	**3.9382**		**2,002.4409**	**2,002.4409**	**0.6401**		**2,018.4424**

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	0.0117	0.7337	0.1998	3.3300e-003	0.1017	5.3200e-003	0.1070	0.0279	5.0900e-003	0.0330		365.7956	365.7956	0.0203	0.0581	383.6206
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	0.0337	0.0235	0.3183	9.2000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		94.3849	94.3849	2.4300e-003	2.4000e-003	95.1601
Total	**0.0454**	**0.7572**	**0.5181**	**4.2500e-003**	**0.2135**	**5.9500e-003**	**0.2194**	**0.0575**	**5.6700e-003**	**0.0632**		**460.1805**	**460.1805**	**0.0227**	**0.0605**	**478.7807**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	0.2893	1.3313	10.9370	0.0208		0.0430	0.0430		0.0430	0.0430	0.0000	2,002.4409	2,002.4409	0.6401		2,018.4424
Total	**0.2893**	**1.3313**	**10.9370**	**0.0208**	**3.1872**	**0.0430**	**3.2302**	**1.5411**	**0.0430**	**1.5841**	**0.0000**	**2,002.4409**	**2,002.4409**	**0.6401**		**2,018.4424**

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	0.0117	0.7337	0.1998	3.3300e-003	0.1017	5.3200e-003	0.1070	0.0279	5.0900e-003	0.0330		365.7956	365.7956	0.0203	0.0581	383.6206
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	0.0337	0.0235	0.3183	9.2000e-004	0.1118	6.3000e-004	0.1124	0.0296	5.8000e-004	0.0302		94.3849	94.3849	2.4300e-003	2.4000e-003	95.1601
Total	**0.0454**	**0.7572**	**0.5181**	**4.2500e-003**	**0.2135**	**5.9500e-003**	**0.2194**	**0.0575**	**5.6700e-003**	**0.0632**		**460.1805**	**460.1805**	**0.0227**	**0.0605**	**478.7807**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0987	18.7651	22.1825	0.0449		0.8317	0.8317		0.7920	0.7920		4,271.1933	4,271.1933	0.9767		4,295.6098
Total	**2.0987**	**18.7651**	**22.1825**	**0.0449**		**0.8317**	**0.8317**		**0.7920**	**0.7920**		**4,271.1933**	**4,271.1933**	**0.9767**		**4,295.6098**

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	0.0180	0.6477	0.2508	3.1000e-003	0.1089	3.6100e-003	0.1125	0.0313	3.4600e-003	0.0348		333.8551	333.8551	0.0112	0.0484	348.5492
Worker	0.1450	0.1008	1.3687	3.9700e-003	0.4806	2.7100e-003	0.4834	0.1275	2.4900e-003	0.1300		405.8551	405.8551	0.0105	0.0103	409.1886
Total	**0.1630**	**0.7485**	**1.6195**	**7.0700e-003**	**0.5895**	**6.3200e-003**	**0.5958**	**0.1588**	**5.9500e-003**	**0.1648**		**739.7102**	**739.7102**	**0.0216**	**0.0587**	**757.7378**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8352	5.0249	26.9453	0.0449		0.1367	0.1367		0.1367	0.1367	0.0000	4,271.1933	4,271.1933	0.9767		4,295.6098
Total	**0.8352**	**5.0249**	**26.9453**	**0.0449**		**0.1367**	**0.1367**		**0.1367**	**0.1367**	**0.0000**	**4,271.1933**	**4,271.1933**	**0.9767**		**4,295.6098**

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	0.0180	0.6477	0.2508	3.1000e-003	0.1089	3.6100e-003	0.1125	0.0313	3.4600e-003	0.0348		333.8551	333.8551	0.0112	0.0484	348.5492
Worker	0.1450	0.1008	1.3687	3.9700e-003	0.4806	2.7100e-003	0.4834	0.1275	2.4900e-003	0.1300		405.8551	405.8551	0.0105	0.0103	409.1886
Total	**0.1630**	**0.7485**	**1.6195**	**7.0700e-003**	**0.5895**	**6.3200e-003**	**0.5958**	**0.1588**	**5.9500e-003**	**0.1648**		**739.7102**	**739.7102**	**0.0216**	**0.0587**	**757.7378**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.4 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	1.9834	17.5484	22.1112	0.0450		0.7412	0.7412		0.7053	0.7053		4,273.6676	4,273.6676	0.9727		4,297.9854
Total	**1.9834**	**17.5484**	**22.1112**	**0.0450**		**0.7412**	**0.7412**		**0.7053**	**0.7053**		**4,273.6676**	**4,273.6676**	**0.9727**		**4,297.9854**

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	0.0175	0.6507	0.2467	3.0500e-003	0.1089	3.6200e-003	0.1125	0.0313	3.4600e-003	0.0348		329.0621	329.0621	0.0112	0.0478	343.5693
Worker	0.1358	0.0901	1.2774	3.8500e-003	0.4806	2.5900e-003	0.4832	0.1275	2.3900e-003	0.1299		397.1397	397.1397	9.4800e-003	9.5900e-003	400.2357
Total	**0.1533**	**0.7407**	**1.5241**	**6.9000e-003**	**0.5895**	**6.2100e-003**	**0.5957**	**0.1588**	**5.8500e-003**	**0.1647**		**726.2017**	**726.2017**	**0.0206**	**0.0573**	**743.8050**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.4 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	lb/day										lb/day					
Off-Road	0.8166	4.9851	26.9311	0.0450		0.1290	0.1290		0.1290	0.1290	0.0000	4,273.6676	4,273.6676	0.9727		4,297.9854
Total	**0.8166**	**4.9851**	**26.9311**	**0.0450**		**0.1290**	**0.1290**		**0.1290**	**0.1290**	**0.0000**	**4,273.6676**	**4,273.6676**	**0.9727**		**4,297.9854**

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	0.0175	0.6507	0.2467	3.0500e-003	0.1089	3.6200e-003	0.1125	0.0313	3.4600e-003	0.0348		329.0621	329.0621	0.0112	0.0478	343.5693
Worker	0.1358	0.0901	1.2774	3.8500e-003	0.4806	2.5900e-003	0.4832	0.1275	2.3900e-003	0.1299		397.1397	397.1397	9.4800e-003	9.5900e-003	400.2357
Total	**0.1533**	**0.7407**	**1.5241**	**6.9000e-003**	**0.5895**	**6.2100e-003**	**0.5957**	**0.1588**	**5.8500e-003**	**0.1647**		**726.2017**	**726.2017**	**0.0206**	**0.0573**	**743.8050**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7852	7.9411	7.5704	0.0164		0.3106	0.3106		0.2875	0.2875		1,563.7048	1,563.7048	0.4893		1,575.9373
Paving	0.0467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8318**	**7.9411**	**7.5704**	**0.0164**		**0.3106**	**0.3106**		**0.2875**	**0.2875**		**1,563.7048**	**1,563.7048**	**0.4893**		**1,575.9373**

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	0.0411	0.0272	0.3862	1.1600e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		120.0655	120.0655	2.8700e-003	2.9000e-003	121.0015
Total	**0.0411**	**0.0272**	**0.3862**	**1.1600e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**120.0655**	**120.0655**	**2.8700e-003**	**2.9000e-003**	**121.0015**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2714	1.3673	10.0901	0.0164		0.0474	0.0474		0.0474	0.0474	0.0000	1,563.7048	1,563.7048	0.4893		1,575.9373
Paving	0.0467					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3181**	**1.3673**	**10.0901**	**0.0164**		**0.0474**	**0.0474**		**0.0474**	**0.0474**	**0.0000**	**1,563.7048**	**1,563.7048**	**0.4893**		**1,575.9373**

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	0.0411	0.0272	0.3862	1.1600e-003	0.1453	7.8000e-004	0.1461	0.0385	7.2000e-004	0.0393		120.0655	120.0655	2.8700e-003	2.9000e-003	121.0015
Total	**0.0411**	**0.0272**	**0.3862**	**1.1600e-003**	**0.1453**	**7.8000e-004**	**0.1461**	**0.0385**	**7.2000e-004**	**0.0393**		**120.0655**	**120.0655**	**2.8700e-003**	**2.9000e-003**	**121.0015**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.6 Architectural Coating - 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					
Archit. Coating	4.1771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.6421	6.3068	7.7615	0.0171		0.2611	0.2611		0.2501	0.2501		1,627.1582	1,627.1582	0.3411		1,635.6860
Total	**4.8191**	**6.3068**	**7.7615**	**0.0171**		**0.2611**	**0.2611**		**0.2501**	**0.2501**		**1,627.1582**	**1,627.1582**	**0.3411**		**1,635.6860**

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	0.0284	0.0189	0.2674	8.1000e-004	0.1006	5.4000e-004	0.1011	0.0267	5.0000e-004	0.0272		83.1223	83.1223	1.9800e-003	2.0100e-003	83.7703
Total	**0.0284**	**0.0189**	**0.2674**	**8.1000e-004**	**0.1006**	**5.4000e-004**	**0.1011**	**0.0267**	**5.0000e-004**	**0.0272**		**83.1223**	**83.1223**	**1.9800e-003**	**2.0100e-003**	**83.7703**

Valor Elementary School Project - AQGHG - Mitigation - South Coast AQMD Air District, Winter

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

3.6 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	4.1771					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2515	1.9684	9.7945	0.0171		0.0376	0.0376		0.0376	0.0376	0.0000	1,627.1582	1,627.1582	0.3411		1,635.6860
Total	**4.4286**	**1.9684**	**9.7945**	**0.0171**		**0.0376**	**0.0376**		**0.0376**	**0.0376**	**0.0000**	**1,627.1582**	**1,627.1582**	**0.3411**		**1,635.6860**

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	0.0284	0.0189	0.2674	8.1000e-004	0.1006	5.4000e-004	0.1011	0.0267	5.0000e-004	0.0272		83.1223	83.1223	1.9800e-003	2.0100e-003	83.7703
Total	**0.0284**	**0.0189**	**0.2674**	**8.1000e-004**	**0.1006**	**5.4000e-004**	**0.1011**	**0.0267**	**5.0000e-004**	**0.0272**		**83.1223**	**83.1223**	**1.9800e-003**	**2.0100e-003**	**83.7703**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7194	2.7612	23.3499	0.0471	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		4,885.7006	4,885.7006	0.3698	0.2409	4,966.7275
Unmitigated	2.7194	2.7612	23.3499	0.0471	5.1034	0.0364	5.1398	1.3600	0.0338	1.3938		4,885.7006	4,885.7006	0.3698	0.2409	4,966.7275

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	1,232.24	0.00	0.00	1,730,067	1,730,067
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	1,232.24	0.00	0.00	1,730,067	1,730,067

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
Elementary School	11.97	0.00	0.00	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	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 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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Other Asphalt Surfaces	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Other Non-Asphalt Surfaces	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721
Parking Lot	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721

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	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
NaturalGas Unmitigated	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	981.71	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		**0.0106**	**0.0963**	**0.0809**	**5.8000e-004**		**7.3100e-003**	**7.3100e-003**		**7.3100e-003**	**7.3100e-003**		**115.4953**	**115.4953**	**2.2100e-003**	**2.1200e-003**	**116.1816**

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	0.98171	0.0106	0.0963	0.0809	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003		115.4953	115.4953	2.2100e-003	2.1200e-003	116.1816
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
Total		**0.0106**	**0.0963**	**0.0809**	**5.8000e-004**		**7.3100e-003**	**7.3100e-003**		**7.3100e-003**	**7.3100e-003**		**115.4953**	**115.4953**	**2.2100e-003**	**2.1200e-003**	**116.1816**

6.0 Area Detail

6.1 Mitigation Measures Area

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Unmitigated	0.7622	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305

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	0.0492					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Total	**0.7622**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0286**	**0.0286**	**7.0000e-005**		**0.0305**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0492					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0133	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0286	0.0286	7.0000e-005		0.0305
Total	**0.7622**	**1.2000e-004**	**0.0133**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0286**	**0.0286**	**7.0000e-005**		**0.0305**

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 Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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