13106 Valley Boulevard Car Wash Project

Air Quality and Greenhouse Gas Emissions Study

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Executive Summary

The project would include the development of a 3,000-square foot carwash on 1.2 acres lot and 12 parking spaces that each provide a vacuum for car wash patrons to clean their vehicle interiors. Signage would be provided throughout the site to warns patrons of areas where one-way circulation is required, and appropriate "Do Not Enter" signage to prevent improper circulation patterns. Operation of the site would occur between 7:00 a.m. to 10:00 p.m.

The project would comply with the following regulatory requirements applicable to air quality: South Coast Air Quality Management District (SCAQMD) Rule 403 (Dust Control); SCAQMD Rule 1113 (architectural coatings volatile organic compound [VOC] limits); Section 93115 of Title 17 of the California Code of Regulations (State fuel standards for construction engines); and Section 2485 of Title 13 of the California Code of Regulations (limit construction equipment engine idling to five minutes).

Construction and operation of the project would not result in criteria pollutant emissions that would exceed regional or local SCAQMD thresholds, and impacts would be less than significant.

The project would be consistent with the population and housing growth forecasts in SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and would therefore be consistent with the 2016 Air Quality Management Plan (AQMP), and impacts would be less than significant.

The project would not result in a carbon monoxide (CO) hot spot or result in diesel particulate matter (DPM) emissions that would exceed SCAQMD's cancer and noncancer risk thresholds, and impacts would be less than significant.

The project would not result in substantial emission of odors from construction or operation, and impacts would be less than significant.

Operation of the project would result in greenhouse gas (GHG) emissions that would not exceed the SCAQMD threshold. Impacts would be less than significant.

The project would be consistent with policies in the 2017 Scoping Plan and would not conflict with the 2020-2045 RTP/SCS. Therefore, impacts would be less than significant.

Given the aforementioned, the project as designed would result in less than significant impacts and no mitigation is necessary.

1 Project Description and Impact Summary

1.1 Introduction

This study analyzes the potential air quality and GHG emissions impacts of the proposed construction and operation of the 13106 Valley Boulevard Car Wash Project (project) in unincorporated area of Los Angeles County near the City of La Puente. Rincon Consultants, Inc. (Rincon) prepared this study under contract to A&S Engineering. Table 1 summarizes project impacts.

Table 1 Summary of Impacts

Impact Statement	Proposed Project's Level of Significance	Applicable Recommendations
Air Quality		
Conflict with or obstruct implementation of the applicable air quality plan?	Less than significant 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	None
Expose sensitive receptors to substantial pollutant concentrations?	Less than significant impact	None
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than significant impact	None
Greenhouse Gas Emissions		
Generate greenhouse gas 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 greenhouse gases?	No impact	None

Regulatory Requirements

Regulatory requirements 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 environmental review and serve to offset or prevent specific impacts. The project would comply with the following notable regulations:

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

SCAQMD Rule 403 includes 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.
- 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), so as 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 so as to minimize exhaust emissions.
- Trucks having no current hauling activity shall not idle but be turned off.
- Exposed surfaces shall be maintained at a minimum soil moisture of 12 percent and vehicle speeds shall be limited to 15 miles per hour on unpaved roads.

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.

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.

Architectural Coatings

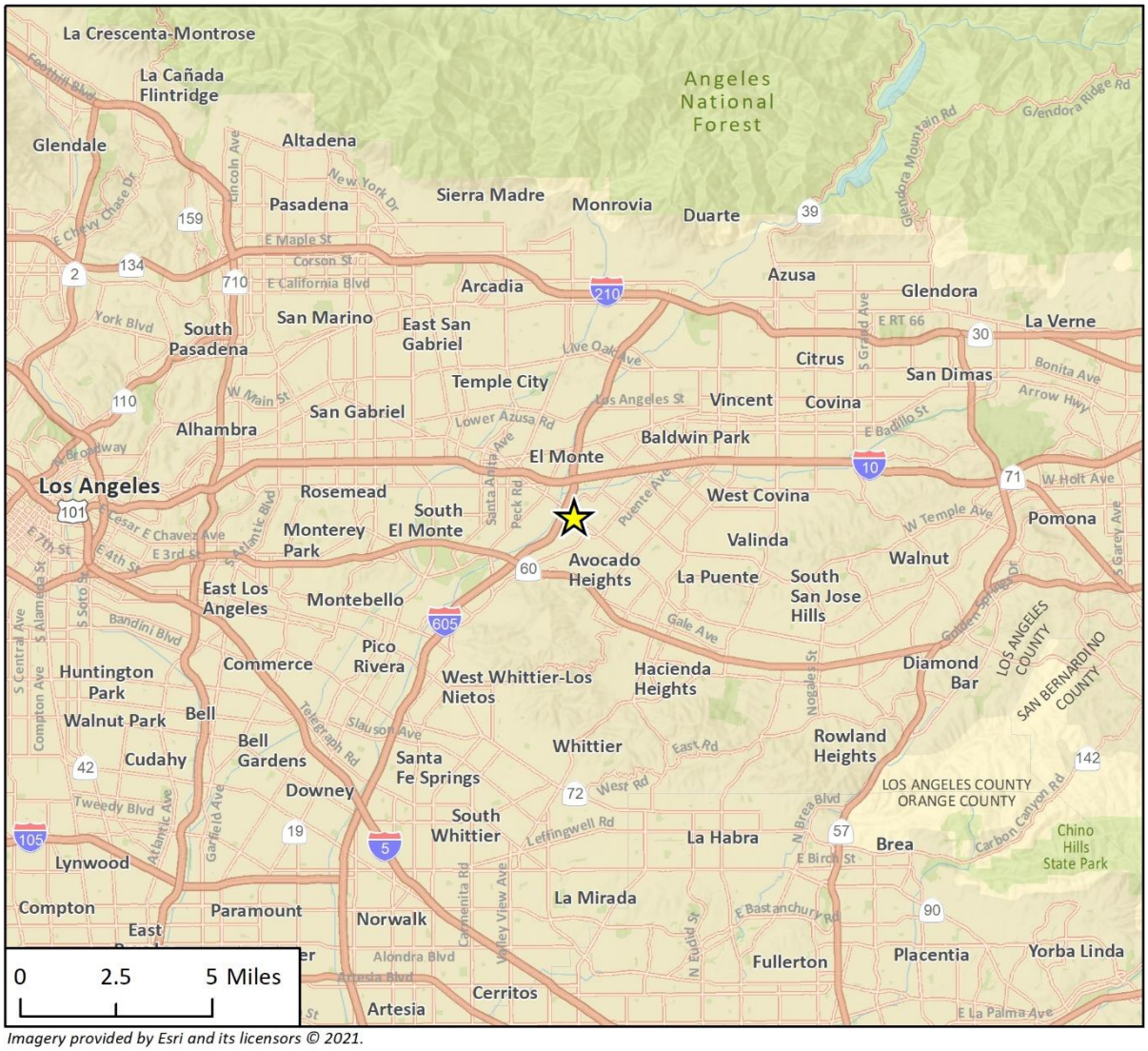
SCAQMD Rule 1113 limits the volatile organic compound (VOC) content of architectural coatings.

1.2 Project Summary

Project Location

The 1.21-acre project site is located in unincorporated Los Angeles County near the City of La Puente at 13106 Valley Boulevard (see Figure 1 and Figure 2). The project site currently has a gas station and convenience store. Access to the existing site is currently provided via four existing driveways – three driveways along Valley Boulevard and one driveway along San Angelo Avenue. Surrounding land uses include commercial uses to the north, east, and west and single-family residences to the south. Interstate 605 is located approximately 0.30 mile northeast of the project site.

Figure 1 Regional Location



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Project Location

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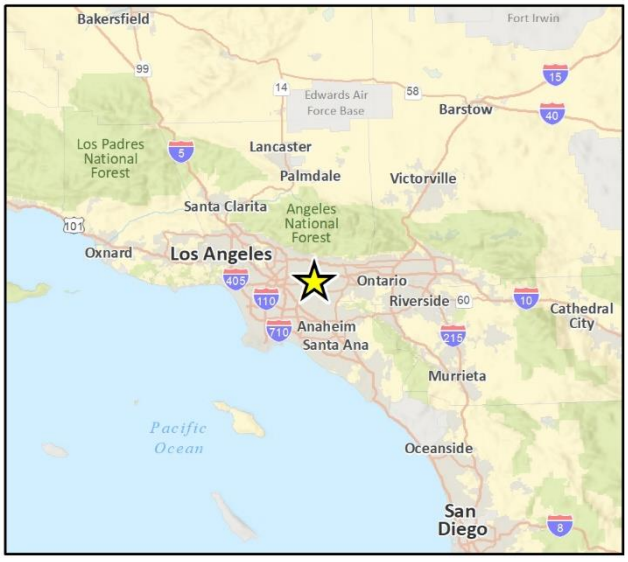

Figure 2 Project Location

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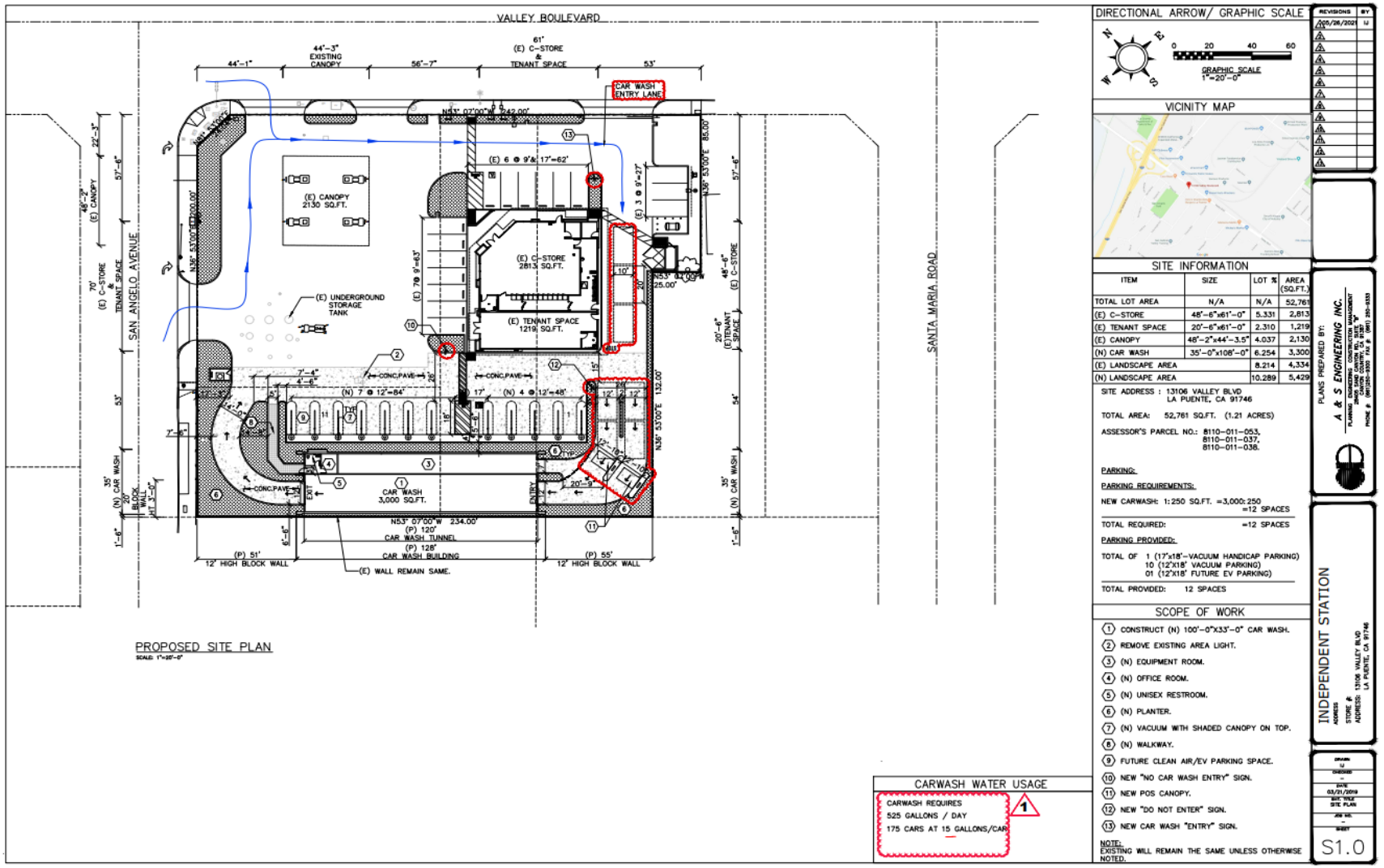
Fig 2 Project Location

Project Description

The project would include the development of a 3,000-square foot carwash on a vacant portion of the existing 1.21-acre lot for the gas station and convenience store (see Figure 3). The proposed car wash tunnel, which operates using a conveyor system, would be capable of servicing 60 vehicles per hour. There are 12 new parking stalls designated for the new car wash component and 16 existing parking spaces. There are three parking spaces on the northeastern portion of the property that would be designated as employee-only parking stalls in the proposed condition. The proposed project would preserve all existing driveways.

Project construction is assumed to begin in June 2022. Construction activities include site preparation, grading, building construction, paving, and architectural coating (e.g., painting). Detailed construction phasing and equipment assumptions are summarized in Section 3.1, *Methodology*, and provided in Appendix A.

Figure 3 Site Plan



Source: A & S Engineering (see Appendix B)

2 Background

2.1 Air Quality

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. 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 sources may be legally operated on roadways and highways. Off-road 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.

The maximum average daily temperature in the project area for the year is approximately 74 degrees Fahrenheit (°F), and the minimum average daily temperature for the year is approximately 55.8°F. Total precipitation in the project area averages approximately 15 inches annually (Western Regional Climate Center 2016).

Air Quality Regulations

Federal Air Quality Regulations

The Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (USC) 7401] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, to achieve the purposes of Section 109 of the CAA [42 USC 7409], the United States Environmental Protection Agency (USEPA) developed primary and secondary National Ambient Air Quality Standards (NAAQS). NAAQS have been designated for the following criteria pollutants of primary concern: 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 (Pb). The primary NAAQS "in the judgment of the Administrator,[1] based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health" and the secondary standards are to "protect the public welfare from any

[1] The term "Administrator" means the Administrator of the USEPA

known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air" [42 USC 7409(b)(2)]. The USEPA classifies specific geographic areas as either "attainment" or "nonattainment" areas for each pollutant based on the comparison of measured data with the NAAQS. States are required to adopt enforceable plans, known as a State Implementation Plan (SIP), to achieve and maintain air quality meeting the NAAQS. State plans also must control emissions that drift across state lines and harm air quality in downwind states. Table 2 lists the current federal standards for regulated pollutants.

Table 2 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	NAAQS	CAAQS
Ozone	1-Hour	–	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	–	–
	24-Hour	–	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	–

ppm = parts per million; NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards
µg/m^3 = micrograms per cubic meter
Source: California Air Resource Board 2016

The SCAB is in non-attainment for the federal standards for ozone and $PM_{2.5}$. SCAB is designated unclassifiable or in attainment for all other federal and state standards.

State Air Quality Regulations

CALIFORNIA AMBIENT AIR QUALITY STANDARDS

The California Clean Air Act (CCAA) was enacted in 1988 (California Health & Safety Code (H&SC) Section 39000 et seq.). Under the CCAA the State has developed the California Ambient Air Quality Standards (CAAQS), which are generally more stringent than the NAAQS. Table 2 lists the current State standards for regulated pollutants. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Like the federal CAA, the CCAA classifies specific geographic areas as either "attainment" or "nonattainment" areas for each pollutant, based on the comparison of measured data within the CAAQS.

California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. If an air basin is not in either federal or State attainment for a criteria pollutant, the basin is classified as a nonattainment area for that pollutant. Under the CAA, once a nonattainment area has achieved the air quality standards for a criteria pollutant, it may be re-designated to an attainment area for that pollutant. To be re-designated, the area must meet air quality standards and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. Areas that have been re-designated to attainment are called maintenance areas. The SCAQMD is in a non-attainment area for the state standards for ozone, PM_{10} and $PM_{2.5}$.

TOXIC AIR CONTAMINANTS

A toxic air contaminant (TAC) is an air pollutant that may cause or contribute to an increase in mortality or serious illness or which may pose a present or potential hazard to human health. TACs may result in long-term health effects such as cancer, birth defects, neurological damage, asthma, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation, runny nose, throat pain, and headaches. TACs are considered either carcinogenic or non-carcinogenic based on the nature of the health effects associated with exposure. For carcinogenic TACs, potential health impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Non-carcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

TACs include both organic and inorganic chemical substances. One of the main sources of TACs in California is diesel engines that emit exhaust containing solid material known as diesel particulate matter (DPM); however, TACs 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.

In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: Health and Safety Code Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, California Senate Bill (SB) 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires the California Air Resources Board (CARB) to review its air quality standards from a children's health perspective, evaluate the statewide air quality monitoring network, and develop any additional air toxic control measures needed to protect children's health.

STATE IMPLEMENTATION PLAN

The State Implementation Plan (SIP) is a collection of documents that set forth the State's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, and permitting), district rules, state regulations, and federal controls. The CARB is the lead agency for all purposes related to the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. All the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220. As the regional air quality management district, the SCAQMD is responsible for preparing and implementing the portion of the SIP applicable to the SCAB.

Local Air Quality Regulations

SCAQMD AQMP

Under state law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the SCAQMD is in non-compliance. The SCAQMD updates the plan every three years. Each SCAQMD 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 8-hour ozone standard of 0.070 ppm that was finalized in 2015. The 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 plan also demonstrates strategies for attainment of the new federal 8-hour ozone standard and vehicle miles traveled (VMT) emissions offsets, pursuant to USEPA requirements (SCAQMD 2017a).

LOS ANGELES COUNTY GENERAL PLAN 2035

The Los Angeles County General Plan 2035 provides the policy framework and establishes the long range vision for how and where the unincorporated areas will grow, and establishes goals, polices, and programs to foster healthy, livable and sustainable communities. The City's General Plan consists of 10 different elements including an Air Quality Element. The Air Quality Element summarizes air quality issues and outlines the goals and policies that will improve air quality and reduce greenhouse gas emissions. The Community Climate Action Plan is a sub-component of the Air Quality Element. Implementation policies set forth in the Air Quality Element include protection from exposure to harmful air pollutants, reduction of air pollution and mobile source emissions

through coordinated land use, transportation and air quality planning, and the implementation of plans and programs to address the impacts of climate change. The following policies are applicable to the proposed project (County of Los Angeles 2015a):

- **Policy AQ 1.1:** Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.
- **Policy AQ 3.1:** Facilitate the implementation and maintenance of the Community Climate Action Plan to ensure that the County reaches its climate change and greenhouse gas emission reduction goals.

Criteria Pollutants

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[2] (ROG) and nitrogen oxides (NO_X). The following subsections describe the characteristics, sources, and health and atmospheric effects of critical air contaminants.

Ozone

The ozone precursors NO_X are formed during the combustion of fuels, while ROG are formed during combustion and evaporation of organic solvents. Because ozone 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 ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

CO is a local pollutant produced in the incomplete combustion of carbon-containing fuels, such as gasoline, natural gas, oil, coal, and wood. The primary source of CO, a colorless, odorless, poisonous gas, is automobile traffic. Therefore, elevated concentrations are usually found near areas of high traffic volumes. The health effects from CO 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

NO_2 is a byproduct of fuel combustion, with the primary sources being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen dioxide 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. NO_2 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

[2] Organic compound precursors of ozone are routinely described by several variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in various acronyms, such as TOG (total organic gases), ROG (reactive organic gases), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, two groups are important from an air quality perspective: non-photochemically reactive in the lower atmosphere, or photochemically reactive in the lower atmosphere (ROG and VOC). SCAQMD uses the term VOC to denote organic precursors.

occur. NO_2 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.

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 concern include PM_{10} (small particulate matter which measures no more than 10 microns in diameter) and $PM_{2.5}$ (fine particulate matter which 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.

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 determine whether ambient air quality meets the California and federal standards. The monitoring station closest to the project is the Pico Rivera monitoring station located at 4144 San Gabriel River Parkway, approximately 5.1 miles southwest of the project site. Table 3 indicates the number of days that each of the federal and state standards have been exceeded at this station in each of the last three years for which data is available. The data collected at the station indicate that the federal 8-hour ozone standards and 24-hour $PM_{2.5}$ were exceeded each year from 2018 to 2020.

Table 3 Ambient Air Quality

Pollutant	2018	2019	2020
Ozone (ppm), maximum concentration 8-hours	0.082	0.091	0.114
Number of days of federal exceedances (>0.070 ppm)	5	7	23
Ozone (ppm), maximum concentration 1-hour	0.115	0.108	0.169
Number of days of federal exceedances (>0.09 ppm)	0	0	3
Nitrogen Dioxide (ppm), maximum concentration 1-hour	0.077	0.062	0.069
Number of days of federal exceedances (>0.18 ppm)	0	0	0
Particulate Matter <2.5 microns ($\mu g/m^3$), maximum concentration 24-hours	56.3	50.2	82.9
Estimated number of days of federal exceedances (>35 $\mu g/m^3$)	2	1	5

Notes: Data was taken from the Pico Rivera Monitoring station as this was the closest monitoring station with recent data.
Source: CARB 2019a

Sensitive Receptors

CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005, OEHHA 2015). Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, religious facilities, and daycare centers.

The closest sensitive receptors are single-family residences located south of the site.

2.2 Greenhouse Gas Emissions

Greenhouse Gas Overview

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 its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

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 byproducts of fossil fuel combustion, whereas CH_4 largely results from off-gassing associated with agricultural practices and landfills.

Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6 (USEPA 2018). However, because the project is a non-industrial development, the quantity of fluorinated gases would not be significant since fluorinated gases are primarily associated with industrial processes; therefore, fluorinated gases are not analyzed further in this document.

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 emissions, referred to as "carbon dioxide equivalent" (CO_2e), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, CH_4 has a GWP of 25, meaning its global warming effect is 25 times greater than carbon dioxide on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2007). N_2O has a GWP of 298 (IPCC 2007).

Greenhouse Gas Emissions Inventory

Global

Worldwide anthropogenic emissions of GHGs were approximately 46,000 million metric tons (MMT or gigatonnes) 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, carbon

dioxide was the most abundant accounting for 76 percent of total 2010 emissions. Methane emissions accounted for 16 percent of the 2010 total, while nitrous oxide and fluorinated gases accounted for 6 percent and 2 percent respectively (IPCC 2014).

Federal

Total U.S. GHG emissions were 6,511.3 million metric tons (MMT or gigatonnes) CO_2e in 2016 (USEPA 2018). Total U.S. emissions have increased by 2.4 percent since 1990; emissions decreased by 1.9 percent from 2015 to 2016 (USEPA 2018). The decrease from 2015 to 2016 was a result of multiple factors, including: (1) substitution from coal to natural gas and other non-fossil energy sources in the electric power sector and (2) warmer winter conditions in 2016 resulting in a decreased demand for heating fuel in the residential and commercial sectors (USEPA 2018). Since 1990, U.S. emissions have increased at an average annual rate of 0.1 percent. In 2015, the industrial and transportation end-use sectors accounted for 29 percent each of GHG emissions (with electricity-related emissions distributed), respectively. Meanwhile, the residential and commercial end-use sectors accounted for 15 percent and 16 percent of CO_2e emissions, respectively (USEPA 2018).

California

Based on CARB's California Greenhouse Gas Inventory for 2000-2016, California produced 429.4 MMT CO_2e in 2016 (CARB 2018a). The largest source of GHGs in California is transportation, which generates 41 percent of the state's total GHG emissions. The industrial sector is the second largest source, contributing 23 percent of the state's GHG emissions, and electric power accounted for approximately 16 percent (CARB 2018a). California emissions are due in part to its large size and large population compared to other states. However, per capita emissions in California are lower than all states except New York (U.S. Energy Information Administration 2019). A factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. CARB has projected that statewide unregulated GHG emissions for the year 2020 will be 509 MMT CO_2e (CARB 2018b). These projections represent the emissions that would be expected to occur in the absence of any GHG reduction actions.

Local

According to Unincorporated Los Angeles County Community Climate Action Plan 2020, the unincorporated areas resulted in GHG emissions of 7.9 million MT CO2e in 2010 (County of Los Angeles 2015b). The majority of emissions were from on-road/off-road transportation and building energy.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through 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 three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature for the decade from 2006 to 2015 was approximately 0.87°C (0.75°C to 0.99°C) higher than the global mean surface temperature over the period from 1850 to 1900. Furthermore, several independently analyzed data records of global and

regional Land-Surface Air Temperature (LSAT) obtained from station observations agree that LSAT as well as sea surface temperatures have increased. 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, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014 and 2018).

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 1°F to 2°F higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include loss in water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018a). 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. 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 as well as regionally-specific climate change case studies (State of California 2018a). One of the regions analyzed, the Greater Los Angeles region, includes western Riverside County where the project is located (State of California 2018b). Below is a summary of some of the potential effects that could be experienced in California and the Greater Los Angeles region as a result of climate change.

Air Quality

Higher temperatures, which are conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. As temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have been occurring at higher elevations in the Sierra Nevada Mountains (State of California 2018a). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality would worsen. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thereby improving the pollution associated with wildfires. Additionally, 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 (California Natural Resources Agency 2009).

In the Los Angeles/San Bernardino 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 2018b). 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 2018b).

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. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. For

example, many southern California cities have experienced their lowest recorded annual precipitation twice within the past decade; however, in a span of only two years, Los Angeles experienced both its driest and wettest years on record (California Department of Water Resources [DWR] 2008). 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 2018a). The Sierra snowpack provides most 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 (DWR 2008; State of California 2018a). 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 2018a).

Like the rest of the state, the region is expected to face a challenging combination of decreased water supply and increased water demand (State of California 2018b). 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 like 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 has the potential to induce substantial sea level rise in the coming century (State of California 2018a). The rising sea level increases the likelihood and risk of flooding. The rate of increase of global mean sea levels over the 2001-2010 decade, as observed by satellites, ocean buoys and land gauges, was approximately 3.2 mm per year, which is double the observed 20th century trend of 1.6 mm per year (World Meteorological Organization [WMO] 2013). As a result, global mean sea levels averaged over the last decade were about 8 inches higher than those of 1880 (WMO 2013). Sea levels are rising faster now than in the previous two millennia and the rise is expected to accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea–level rise of 10 to 37 inches by 2100 (IPCC 2018). A rise in sea levels could completely erode 31 to 67 percent of southern California beaches, result in flooding of approximately 370 miles of coastal highways during 100-year storm events, jeopardize California's water supply due to saltwater intrusion, and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018a). In addition, increased CO_2 emissions can cause oceans to acidify due to the carbonic acid it forms. 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 2018b). 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 $50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2018). 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; water demand could increase as hotter conditions lead to the loss of soil moisture; 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 2018a). In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006). More frequent droughts could substantially decrease groundwater recharge and therefore adversely affect agricultural operations that use groundwater from local wells (State of California 2018b). This could contribute to higher food prices and shortages.

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 2018a). 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 2018a). 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.

Greenhouse Gas Regulations

Federal Regulations

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al*. ([2007] 549 U.S. 05-1120) 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 CAA 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 2014, the U.S. Supreme Court in *Utility Air Regulatory Group v. EPA* (134 S. Ct. 2427 [2014]) held that USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source is

a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are 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 (BACT).

California Regulations

CALIFORNIA ADVANCED CLEAN CARS PROGRAM

AB 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, USEPA granted the waiver of CAA preemption to California for its GHG emission standards for motor vehicles beginning with the 2009 model year. Pavley I regulates model years from 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the Low Emissions Vehicles (LEV), Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs, and should provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006

California's major initiative for reducing GHG emissions is outlined in AB 32, the "California Global Warming Solutions Act of 2006," which was signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and required CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 required 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 limit of 427 MMT CO_2e. The Scoping Plan was approved by CARB on December 11, 2008 and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan 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 2018c).

SB 32, signed into law on September 8, 2016, extended AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remained 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, as well as implementation of recently adopted policies and policies, such as SB 350 and SB 1383 (see 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 no more than 6 metric tons (MT) CO_2e by 2030 and 2 MT CO_2e by 2050 (CARB 2017).

SENATE BILL 97

SB 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Natural Resources Agency (Resources Agency) adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

SENATE BILL 375

SB 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPOs) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). 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. The bill 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

The bill 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 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

EXECUTIVE ORDER B-55-18

On September 10, 2018, Governor Brown 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 INTEGRATED WASTE MANAGEMENT ACT (ASSEMBLY BILL 341)

The California Integrated Waste Management Act of 1989, as modified by AB 341, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities; (2) diversion of 50 percent of all solid waste on and after January 1, 2000; and (3) diversion of 75 percent of all solid waste by 2020, and annually thereafter. CalRecycle is required to develop strategies to implement AB 341, including source reduction.

ASSEMBLY BILL 2230

AB 2230, passed in 2012, required all car washes constructed after January 1, 2014, to install a water recycling system that recycles and reuses at least 60 percent of the wash and rinse water, or to use recycled water provided by a water supplier for at least 60 percent of its wash and rinse water.

California Building Standards Code

CALIFORNIA CODE OF REGULATIONS, TITLE 24 – CALIFORNIA BUILDING CODE

The California Code of Regulations, Title 24, is referred to as the California Building Code, or CBC. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, handicap accessibility, and so on. The CBC's energy efficiency and green building standards are outlined below.

PART 6 – BUILDING ENERGY EFFICIENCY STANDARDS

California Code of Regulations, Title 24, Part 6 is the Building Energy Efficiency Standards. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. The Building Energy Efficiency Standards is updated periodically to incorporate and consider new energy-efficiency technologies and methodologies as they become available. New construction and major renovations must demonstrate their compliance with the current Building Energy Efficiency Standards through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC).

The 2019 standards will be in effect on January 1, 2020, and therefore would be applicable to the project. The 2019 standards focus on four key areas: (1) smart residential photovoltaic systems; (2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); (3) residential and nonresidential ventilation requirements; and (4) and nonresidential lighting requirements (CEC 2018a). Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards, and single-family homes will be 7 percent more energy efficient (CEC 2018b). When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards (CEC 2018b).

PART 11 – CALIFORNIA GREEN BUILDING STANDARDS

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 Green Building 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 EV charging stations in newly constructed attached garages for single-family and duplex dwellings; and
- Installation of EV charging stations at least three percent of the parking spaces for all new multi-family developments with 17 or more units.

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, 20 percent permeable paving, 20 percent cement reduction, 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, 30 percent permeable paving, and 30 percent cement reduction, cool/solar reflective roof.

Similar to the compliance reporting procedure for demonstrating Building Energy Efficiency Standards 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 low-rise residential and 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).

UNINCORPORATED LOS ANGELES COUNTY COMMUNITY CLIMATE ACTION PLAN

The County adopted the Community Climate Action Plan (CCAP) in August 2015 (County of Los Angeles 2015b). The CCAP, which is a component of the County General Plan, sets a target to reduce GHG emissions from community activities in the unincorporated areas of Los Angeles County by at least 11 percent below 2010 levels by 2020. The CCAP describes the County's plan for achieving this goal, including specific strategy areas for each of the major emission sectors, and provides details on the 2010 and projected 2020 emissions in the unincorporated areas. The actions in the CCAP are priority actions and intended for near-term implementation, such that the County can achieve its GHG reduction goal for 2020 for the unincorporated areas of Los Angeles County. The CCAP includes 26 local actions to reduce GHG emissions, grouped into five strategy areas: green building and energy; land use and transportation; water conservation and wastewater; waste reduction, reuse, and recycling; and land conservation and tree planting.

3 Impact Analysis

3.1 Methodology

Criteria pollutant and GHG emissions for project construction and operation were calculated using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The model calculates criteria pollutant emissions of CO, PM_{10}, $PM_{2.5}$, SO_2, the ozone precursors, ROG and NO_X, and GHGs emissions of CO_2, N_2O, and CH_4, reported as CO_2e. The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices A, D, and E (CAPCOA 2017). The input data and subsequent construction and operation emission estimates for the proposed project are discussed below. CalEEMod output files for the project are included in Appendix A to this report.

Construction Emissions

Project construction would primarily generate temporary criteria pollutant and GHG emissions from construction equipment operation on-site and construction worker vehicle trips to and from the site. Construction input data for CalEEMod include the anticipated start and finish dates of construction activity. The analysis assessed maximum daily emissions from individual construction activities, including site preparation, grading, building construction, paving, and architectural coating. Construction would require heavy equipment during site preparation, grading, building construction, and paving. Construction equipment estimates are based on surveys of construction projects within California conducted by members of CAPCOA. Default construction phase lengths were generated in CalEEMod from the estimated start date of June 1, 2022. The project would balance soil on-site; therefore, no import or export of soil would be required.

The quantity, duration, and the intensity of construction activity influences the amount of construction emissions and their related pollutant concentrations that occur at any one time. The emission forecasts modeled for this report reflect conservative assumptions where a relatively large amount of construction is occurring in a relatively intensive manner. If construction is delayed or occurs over a longer period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix than assumed in the CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

CalEEMod has the capability to calculate reductions in construction emissions from the effects of dust control, diesel-engine classifications, and other selected emissions reduction measures. Emissions calculations assume application of water during grading and a 15-mph speed limit on unpaved surfaces in compliance with SCAQMD Rule 403, Fugitive Dust (as detailed in Section 1, *Project Description and Impact Summary*). Based on CalEEMod version 2020.4.0, the PM_{10} and $PM_{2.5}$ reduction for watering two times per day is 55 percent.

Pursuant to SCAQMD guidance, total construction GHG emissions resulting from the project are amortized over 30 years and added to operational GHG emissions.

Operational Emissions

In CalEEMod, operational sources of criteria pollutant emissions include area, energy, and mobile sources; GHG emissions include water and solid waste sources in addition to area, energy, and mobile sources. CalEEMod does not contain a land use directly correlated to a car wash use; the project's car wash was attributed to the "Automobile Care Center" land use subtype, with mobile, energy, and water use modified for the unique characteristics of a car wash, as described below.

Energy Sources

Emissions from energy use include electricity and natural gas use. The emissions factors for natural gas combustion are based on USEPA's AP-42 (*Compilation of Air Pollutant Emissions Factors*) and California Climate Action Registry (CCAR) General Reporting Protocol (CCAR 2009). Electricity emissions only apply to GHG emissions (as the energy is generated off-site and therefore may not be relevant for local and regional air quality conditions) and are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CAPCOA 2017). The default electricity consumption values in CalEEMod include the CEC-sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies.

Data from professional car wash industry surveys and reports were used to estimate the energy requirements for the proposed car wash. The annual number of vehicles that would be washed for the project was estimated based on a 2015 industry survey, which reported an average of approximately 80,000 vehicles per year for exterior-only automated conveyor car washes (Professional Car Washing 2017). The energy requirements for the car wash were estimated using car wash industry survey cost averages of $0.50 per vehicle for electricity and $0.12 per vehicle for natural gas (Professional Car Washing 2014). The cost of $0.50 for electricity was converted to 4.69 kilowatt hours (kwh) per vehicle for electricity based on an average cost of $0.1066 per kwh for commercial customers in the U.S. in 2017 (U.S. Energy Information Administration [USEIA] 2018a) for a total annual electricity use of 375,200 kwh per year. The cost of $0.12 for natural gas was converted to 15.79 kilo-British Thermal Units (kBtu) per vehicle for natural gas based average cost of $7.88 per 1,000 cubic feet[3] for commercial customers in the U.S. in 2017 (USEIA 2018b) for a total annual natural gas use of 1,263,200 kBtu per year.

Area Sources

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod and utilize standard emission rates from CARB, USEPA, and emission factor values provided by the local air district (CAPCOA 2017).

Waste Sources

GHG emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CAPCOA 2017). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

[3] For natural gas, 1,000 cubic feet = 1,037 kBtu

Water and Wastewater Sources

GHG emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for northern and southern California. A 20 percent reduction in indoor potable water use was incorporated in the model in accordance with CALGreen standards.

Based off the project site plans provided by the client, the project would use 525 gallons of water per day for the maintenance of the car wash and 15 gallons per day per car over an estimated 175 cars. Therefore, the proposed car wash would have an estimated water usage of 1,149,750 gallons per year.

Mobile Sources

Mobile source emissions are generated by the increase in vehicle trips to and from the project site associated with operation of onsite development. Since a car wash land use is not included in CalEEMod, trip rates were estimated using Institute of Transportation Engineers (ITE) trip rates (ITE 2017). ITE trip rates for an automated car wash (#948) are estimated as 30.4 Saturday peak hour trips and 14.2 Weekday p.m. peak hour trips. As the ITE trip rates do not list a Sunday trip rate, Sunday's peak our trips are assumed to be the same as the data provided by ITE for Saturday. Peak hour trips are approximately 10 percent of average daily trips; therefore, the project was estimated to result in 304 average daily trips.

3.2 Significance Thresholds

Air Quality

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 SCAB, shown in Table 4.

Table 4 SCAQMD Regional Significance Thresholds

Construction Thresholds	Operational Thresholds
75 pounds per day of VOC	55 pounds per day of VOC
100 pounds per day of NO_X	55 pounds per day of NO_X
550 pounds per day of CO	550 pounds per day of CO
150 pounds per day of SO_X	150 pounds per day of SO_X
150 pounds per day of PM_{10}	150 pounds per day of PM_{10}
55 pounds per day of $PM_{2.5}$	55 pounds per day of $PM_{2.5}$

Source: SCAQMD 2019

Localized Significance Thresholds

In addition to the above regional thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the *CEQA Air Quality Handbook* (1993). LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO_X, CO, PM_{10}, and $PM_{2.5}$. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), distance to the sensitive receptor, and project size. LSTs have been developed for emissions within construction areas up to five acres in size. However, LSTs only apply to emissions in a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008). As such, LSTs are typically applied only to construction emissions because most operational emissions are associated with project-generated vehicle trips.

The SCAQMD provides LST lookup tables for project sites that measure one, two, or five acres. If a site is greater than five acres, SCAQMD recommends a dispersion analysis be performed. Project construction would disturb an area of approximately 0.4 acre; therefore, this analysis utilizes the one-acre LSTs. LSTs are provided for receptors at 82 to 1,640 feet from the project disturbance boundary to the sensitive receptors. Construction activity would occur near the boundary of the closest sensitive receptor, which are residential home properties. According to the SCAQMD's publication, *Final LST Methodology*, projects with boundaries located closer than 82 feet to the nearest receptor should use the LSTs for receptors located at 82 feet. Therefore, the analysis below uses the LST values for 82 feet. In addition, the project is in SRA-9 (East San Gabriel Valley). LSTs for construction in SRA-9 on a one-acre site with a receptor 82 feet away are shown in Table 5.

Table 5 SCAQMD LSTs for Construction (SRA 9)

Pollutant	Allowable Emissions for a 1-acre Site in SRA 9 for a Receptor 82 Feet Away (lbs/day)
Gradual conversion of NO_X to NO_2	89
CO	623
PM_{10}	5
$PM_{2.5}$	3

Source: SCAQMD 2009

Health Risk Thresholds

SCAQMD has developed significance thresholds for the emissions of TACs based on health risks associated with elevated exposure to such compounds. For carcinogenic compounds, cancer risk is assessed in terms of incremental excess cancer risk. A project would result in a potentially significant impact if it would generate an incremental excess cancer risk of 10 in 1 million (1×10^{-6}) or a cancer burden of 0.5 excess cancer cases in areas exceeding a one-in-one-million risk. In addition, non-carcinogenic health risks are assessed in terms of a hazard index. A project would result in a potentially significant impact if it would result in a chronic and acute hazard index greater than 1.0 (SCAQMD 2019).

Greenhouse Gas Emissions

Based on Appendix G of the CEQA Guidelines, impacts related to GHG emissions from the project would be significant if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases

Individual projects do not generate enough GHG emissions to substantially influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that may be significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be 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]).

To determine a project-specific threshold, guidance on GHG significance thresholds in the region from SCAQMD, the air district in which the project site is located, was used. The SCAQMD's GHG CEQA Significance Threshold Working Group considered a tiered approach to determine the significance of residential and commercial projects. The draft tiered approach is outlined in meeting minutes dated September 28, 2010 (SCAQMD 2010):

- **Tier 1.** If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2.** Consists of determining whether the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines Section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3.** Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 3,000 MT CO_2e per year for commercial projects.
- **Tier 4.** Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT CO_2e per year for land use projects.

The project would not be statutory or categorically exempt, and therefore Tier 1 does not apply. The County does not have a local, qualified GHG reduction plan for the project to tier off, thus Tier 2 would not apply. Therefore, for a project-specific threshold, the County has selected SCAQMD's 3,000 MT CO_2e per year threshold for non-industrial projects as the applicable project-specific threshold, in accordance with Tier 3. The SCAQMD's 3,000 MT CO_2e per year threshold was determined based upon a 90 percent capture rate of GHG emissions (i.e., 90 percent of emissions would occur for projects that exceed the 3,000 MT CO_2e per year threshold, and therefore mitigation is focused upon those projects). In addition, the threshold is frequently used by jurisdictions across southern California to determine GHG emissions impacts from commercial projects.

3.3 Impact Analysis

Air Quality

CEQA Appendix G Air Quality Threshold 1
Conflict with or obstruct implementation of the applicable air quality plan *(Less Than Significant)*.

A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding forecasts used in the development of the AQMP. The 2016 AQMP, the most recent AQMP adopted by the SCAQMD, incorporates local city general plans and the SCAG's 2016 RTP/SCS socioeconomic forecast projections of regional population, housing, and employment growth.

The employment growth forecasts in SCAG's 2016 RTP/SCS for the unincorporated areas in Los Angeles County estimate that the total number of jobs would increase from 222,900 in 2012 to 288,400 in 2040, for an increase of 65,500 jobs. The minor increase in employment anticipated from a car wash (i.e., several employees) would be within the SCAG's projected 2040 employment increase of 65,500 jobs and the project would not cause employment in the City to exceed official regional employment projections.

In addition, the AQMP provides strategies and measures to reach attainment with the thresholds for 8-hour and 1-hour ozone and $PM_{2.5}$. As shown in Table 6 and Table 7 below, the project would not generate criteria pollutant emissions that would exceed SCAQMD thresholds for ozone precursors (VOC and NO_X) and $PM_{2.5}$. Since the project's employment would be within SCAG 2016 forecasts, the project would be consistent with the AQMP and impacts would be less than significant.

CEQA Appendix G Air Quality Threshold 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 *(Less Than Significant)*.

In accordance with CEQA Guidelines Section 15064(h)(3), the SCAQMD's approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and State Clean Air Acts. If the project's mass regional emissions do not exceed the applicable SCAQMD, then the project's criteria pollutant emissions would not be cumulatively considerable.

Construction

Table 6 summarizes the estimated maximum daily emissions (lbs) of pollutants associated with construction of the proposed project. As shown below, VOC, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ emissions would not exceed SCAQMD regional thresholds or LSTs. Because the project would not exceed SCAQMD's regional construction thresholds or LSTs, project construction would not result in a cumulatively considerable net increase of a criteria pollutant, and impacts would be less than significant.

Table 6 Project Construction Emissions

	Maximum Emissions (lbs/day)					
	VOC	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Construction Year 2022	3	12	8	< 1	3	2
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**
Maximum On-site Emissions	3	12	7	< 1	3	2
SCAQMD Localized Significance Thresholds (LSTs)	N/A	89	623	N/A	5	3
Threshold Exceeded?	**N/A**	**No**	**No**	**N/A**	**No**	**No**

Notes: See Appendix A for modeling results. 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

Table 7 summarizes the project's operational emissions by emission source (area, energy, and mobile). As shown below, the emissions generated by operation of the proposed project would not exceed SCAQMD regional thresholds for criteria pollutants. Therefore, the project would not contribute substantially to an existing or projected air quality violation. In addition, because criteria pollutant emissions and regional thresholds are cumulative in nature, the project would not result in a cumulatively considerable net increase of criteria pollutants.

Table 7 Project Operational Emissions

Emission Source	Maximum Daily Emissions (lbs/day)					
	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	2	2	15	<1	3	1
Project Emissions	2	2	15	<1	3	1
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: See Appendix A for modeling results. Some numbers may not add up precisely due to rounding considerations.

CEQA Appendix G Air Quality Threshold 3
Expose sensitive receptors to substantial pollutant concentrations *(Less Than Significant)*.

CO Hot Spots

A carbon monoxide (CO) hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO 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 CO 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 CO 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 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.

The total ADT for Valley Boulevard/San Angelo Ave intersection was measured at 49,510 vehicles (County of Los Angeles 2011). This is much less than the 100,000-vehicle count on the Wilshire Boulevard/Veteran Avenue intersection, which itself is well below the standards. Furthermore, due to stricter vehicle emissions standards in newer cars and new technology that increases fuel economy, CO emission factors under future land use conditions would be lower than those under existing conditions. Thus, even though there would be more vehicle trips under the proposed project than under existing conditions, 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.

Toxic Air Contaminants

Construction activities associated with the proposed project would be sporadic, transitory, and short term in nature. The greatest potential for TAC emissions during construction would be related

to diesel particulate matter (DPM) associated with heavy equipment operations during earth-moving activities, which are estimated to last approximately three days. The assessment of cancer risk is typically based on a 30-year exposure duration. Because exposure to diesel exhaust would be well below 30 years, construction of the proposed project is not anticipated to result in an elevated cancer risk to exposed persons due to the short-term nature of construction. As such, project-related TAC emission impacts during construction would be less than significant.

Long-term operational emissions include toxic substances such as cleaning agents in use on site. Compliance with State and federal handling regulations would ensure that emissions remain below a level of significance. The use of such substances such as cleaning agents is regulated by the 1990 Federal Clean Air Act Amendments as well as State-adopted regulations for the chemical composition of consumer products. As such, project-related TAC emission impacts during operation would be less than significant.

CEQA Appendix G Air Quality Threshold 4
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people *(Less Than Significant)*.

For construction activities, odors would be short-term in nature and are subject to SCAQMD Rule 402 *Nuisance* (CARB 2018a). Construction activities would be temporary and transitory and associated odors would cease upon construction completion. Accordingly, the proposed project would not create objectionable odors affecting a substantial number of people during construction, and short-term impacts would be less than significant.

Common sources of operational odor complaints include sewage treatment plants, landfills, recycling facilities, and agricultural uses. The proposed project would not include f these uses as the proposed project entails basic car wash uses that do not typically emit odors. Solid waste generated by the proposed on-site uses would be collected by a contracted waste hauler, ensuring that any odors resulting from on-site waste would be managed and collected in a manner to prevent the proliferation of odors. Operational odor impacts would be less than significant.

Greenhouse Gas Emissions

CEQA Appendix G Greenhouse Gas Emissions Threshold 1
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment *(Less Than Significant)*.

This section evaluates potential impacts of the proposed project related to the generation of GHG emissions. Complete modeling results are included as Appendix A of this report.

Construction Emissions

As shown in Table 8, construction activity for the project would generate an estimated 58.0 MT of CO_2e. When amortized over a 30-year period, construction of the project would generate approximately 1.9 MT of CO_2e per year.

Table 8 Estimated Construction Greenhouse Gas Emissions

Construction Year	Annual Emissions MT CO_2e
2021	58
Total	58
Amortized over 30 years	1.9

Notes: See Appendix A for modeling results.

Operational and Total Project Emissions

Table 9 combines the construction and operational GHG emissions associated with development of the project. As shown, annual emissions from the proposed project would be approximately 425 MT of CO_2e. These emissions would not exceed SCAQMD's 3,000 MT per year threshold. Therefore, impacts from GHG emissions would be less than significant.

Table 9 Estimated Annual Greenhouse Gas Emissions

Emission Source	Annual Emissions MT CO_2e
Construction	2
Operational	
Area	<1
Energy	137
Mobile	278
Solid Waste	6
Water	2
Net Total	**425**
SCAQMD Threshold	3,000
Exceeds Threshold?	**No**

Notes: Emissions modeling was completed using CalEEMod. See Appendix A for modeling results. Some numbers may not add up precisely due to rounding considerations.

CEQA Appendix G Greenhouse Gas Emissions Threshold 2
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases *(Less Than Significant)*.

There are numerous State plans, policies, and regulations adopted to reduce GHG emissions. The principal state plan and policy is AB 32, the California Global Warming Solutions Act of 2006, and the follow up, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the State to achieve the reductions. The 2017 Scoping Plan's goals include reducing fossil fuel use and energy demand and maximizing recycling and diversion from landfills. The project would comply with the latest Title 24 Green Building Code and Building Efficiency Energy Standards. Therefore, the project is consistent with the applicable GHG reduction strategies in the 2017 Scoping Plan.

According to the 2020-2045 RTP/SCS, the updated targets for the SCAG region are eight percent below 2005 per capita emission levels by 2020 (this value is unchanged from the previous 2020 CARB target) and 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. Further specific actions to reduce greenhouse gas emissions under the 2020-2045 RTP/SCS include designing transportation options that reduce the reliance on solo car trips, promoting low emission technologies such as electric vehicles and ride sharing, supporting statewide greenhouse gas emissions legislation, and pursuing funding opportunities to support local sustainable development projects that reduce GHG emissions. In general, a car wash use is planned to satisfy existing vehicle transportation demand and is inherently not oriented for sustainable transportation uses such as transit or rail. The car wash would be used by electric vehicles in a similar fashion to gasoline vehicles. Therefore, sustainable transportation initiatives would not apply to the project.

Given the above considerations regarding SCAG's 2020-2045 RTP/SCS, the 2017 Scoping Plan, and additional state requirements, the project is consistent with State and local policies for reducing GHG emissions, and no impacts would occur.

4 Conclusions and Recommendations

As detailed above, construction and operation of the project would not result in criteria pollutant emissions that would exceed SCAQMD thresholds, and impacts would be less than significant.

The project would be consistent with the population and housing growth forecasts in SCAG's 2016 RTP/SCS, and would therefore be consistent with the 2016 AQMP, and impacts would be less than significant.

The project would not result in a CO hot spot or result in DPM emissions that would exceed SCAQMD's cancer and noncancer risk thresholds, and impacts would be less than significant.

The project would not result in substantial emission of odors from construction or operation, and impacts would be less than significant.

Operation of the project would result in GHG emissions that would not exceed the SCAQMD threshold. Impacts would be less than significant.

The project would be consistent with policies in the 2017 Scoping Plan and would not conflict with the 2020-2045 RTP/SCS. Therefore, impacts would be less than significant.

The project would comply with the following regulatory requirements:

Regulatory Requirements

Demolition, Grading, and Construction Activities: Compliance with Provisions of SCAQMD Rule 403.

Rule 403 includes 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.
- 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), so as 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 so as to minimize exhaust emissions.
- Trucks having no current hauling activity shall not idle but be turned off.
- Exposed surfaces shall be maintained at a minimum soil moisture of 12 percent and vehicle speeds shall be limited to 15 miles per hour on unpaved roads.

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.

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.

Architectural Coatings

SCAQMD Rule 1113 limits the volatile organic compound (VOC) content of architectural coatings.

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Appendix A

CalEEMod Output Files

Valley Boulevard Car Wash Project - AQ - South Coast AQMD Air District, Annual

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

Valley Boulevard Car Wash Project - AQ

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	12.00	Space	0.00	4,800.00	0
Automobile Care Center	3.00	1000sqft	0.40	3,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on project's site plans.

Construction Phase -

Demolition -

Architectural Coating - Based on SCAQMD Rule 1113 Architectural Coating.

Vehicle Trips - A peak hour traffic of 14.2 and 30.4 for weekday and saturday, respectively, in the traffic memo to calculate average daily trips (ADT). Assuming peak hour traffic is 10% of ADT per 1,000 square feet. Assuming Sunday trip rate as Saturday.

Area Coating - Based on SCAQMD Rule 1113 Architectural Coating

Energy Use - Energy assumption for Car Wash Projects using Professional Car Washing survey in 2015 and U.S. Energy Information Administration electricity conversion. Divide KWhr/yr and KBTU/yr to square feet of the project (3,000 sq feet)

Water And Wastewater - Based off project's Site Plan Car Wash Water Usage of 525 gallons per day and 175 cars at 15 gallons per car.

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

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

Area Mitigation - Based on SCAQMD Rule 1113 Architectural Coating

Water Mitigation -

Operational Off-Road Equipment -

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	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblEnergyUse	NT24E	5.75	125.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	T24E	2.01	0.00
tblEnergyUse	T24NG	13.51	421.10
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	0.07	0.40
tblVehicleTrips	ST_TR	23.72	304.00
tblVehicleTrips	SU_TR	11.88	304.00
tblVehicleTrips	WD_TR	23.72	142.00
tblWater	IndoorWaterUseRate	282,243.32	0.00
tblWater	OutdoorWaterUseRate	172,987.84	1,149,750.00

2.0 Emissions Summary

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

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0462	0.3881	0.3959	6.5000e-004	8.1700e-003	0.0202	0.0284	3.2900e-003	0.0186	0.0219	0.0000	57.5172	57.5172	0.0175	1.9000e-004	58.0109
Maximum	**0.0462**	**0.3881**	**0.3959**	**6.5000e-004**	**8.1700e-003**	**0.0202**	**0.0284**	**3.2900e-003**	**0.0186**	**0.0219**	**0.0000**	**57.5172**	**57.5172**	**0.0175**	**1.9000e-004**	**58.0109**

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					
2022	0.0462	0.3881	0.3959	6.5000e-004	5.1100e-003	0.0202	0.0253	1.8700e-003	0.0186	0.0205	0.0000	57.5172	57.5172	0.0175	1.9000e-004	58.0109
Maximum	**0.0462**	**0.3881**	**0.3959**	**6.5000e-004**	**5.1100e-003**	**0.0202**	**0.0253**	**1.8700e-003**	**0.0186**	**0.0205**	**0.0000**	**57.5172**	**57.5172**	**0.0175**	**1.9000e-004**	**58.0109**

	ROG	NOx	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**	**37.45**	**0.00**	**10.81**	**43.16**	**0.00**	**6.52**	**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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2022	8-31-2022	0.2593	0.2593
2	9-1-2022	9-30-2022	0.0833	0.0833
		Highest	0.2593	0.2593

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	0.0119	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004
Energy	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7100e-003	4.7100e-003		4.7100e-003	4.7100e-003	0.0000	135.8663	135.8663	7.0700e-003	1.9400e-003	136.6201
Mobile	0.2131	0.2146	1.6428	2.9300e-003	0.2849	2.7200e-003	0.2876	0.0760	2.5300e-003	0.0786	0.0000	272.3925	272.3925	0.0246	0.0155	277.6296
Waste						0.0000	0.0000		0.0000	0.0000	2.3263	0.0000	2.3263	0.1375	0.0000	5.7633
Water						0.0000	0.0000		0.0000	0.0000	0.0000	2.2654	2.2654	1.9000e-004	2.0000e-005	2.2771
Total	**0.2319**	**0.2765**	**1.6950**	**3.3000e-003**	**0.2849**	**7.4300e-003**	**0.2923**	**0.0760**	**7.2400e-003**	**0.0833**	**2.3263**	**410.5245**	**412.8508**	**0.1693**	**0.0175**	**422.2904**

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0119	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004
Energy	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7100e-003	4.7100e-003		4.7100e-003	4.7100e-003	0.0000	135.8663	135.8663	7.0700e-003	1.9400e-003	136.6201
Mobile	0.2131	0.2146	1.6428	2.9300e-003	0.2849	2.7200e-003	0.2876	0.0760	2.5300e-003	0.0786	0.0000	272.3925	272.3925	0.0246	0.0155	277.6296
Waste						0.0000	0.0000		0.0000	0.0000	2.3263	0.0000	2.3263	0.1375	0.0000	5.7633
Water						0.0000	0.0000		0.0000	0.0000	0.0000	1.8123	1.8123	1.5000e-004	2.0000e-005	1.8216
Total	**0.2319**	**0.2765**	**1.6950**	**3.3000e-003**	**0.2849**	**7.4300e-003**	**0.2923**	**0.0760**	**7.2400e-003**	**0.0833**	**2.3263**	**410.0715**	**412.3978**	**0.1693**	**0.0175**	**421.8350**

	ROG	NOx	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**	**0.11**	**0.11**	**0.02**	**0.00**	**0.11**

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	6/1/2022	6/1/2022	5	1	
2	Grading	Grading	6/2/2022	6/3/2022	5	2	
3	Building Construction	Building Construction	6/4/2022	10/21/2022	5	100	

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

4	Paving	Paving	10/22/2022	10/28/2022	5	5	
5	Architectural Coating	Architectural Coating	10/29/2022	11/4/2022	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,500; Non-Residential Outdoor: 1,500; Striped Parking Area: 288 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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

Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	3.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2022

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					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	3.4700e-003	1.9800e-003	0.0000		1.3000e-004	1.3000e-004		1.2000e-004	1.2000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4310
Total	**2.9000e-004**	**3.4700e-003**	**1.9800e-003**	**0.0000**	**2.7000e-004**	**1.3000e-004**	**4.0000e-004**	**3.0000e-005**	**1.2000e-004**	**1.5000e-004**	**0.0000**	**0.4275**	**0.4275**	**1.4000e-004**	**0.0000**	**0.4310**

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3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0223	0.0223	0.0000	0.0000	0.0225
Total	**1.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0223**	**0.0223**	**0.0000**	**0.0000**	**0.0225**

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					1.2000e-004	0.0000	1.2000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	3.4700e-003	1.9800e-003	0.0000		1.3000e-004	1.3000e-004		1.2000e-004	1.2000e-004	0.0000	0.4275	0.4275	1.4000e-004	0.0000	0.4310
Total	**2.9000e-004**	**3.4700e-003**	**1.9800e-003**	**0.0000**	**1.2000e-004**	**1.3000e-004**	**2.5000e-004**	**1.0000e-005**	**1.2000e-004**	**1.3000e-004**	**0.0000**	**0.4275**	**0.4275**	**1.4000e-004**	**0.0000**	**0.4310**

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3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0223	0.0223	0.0000	0.0000	0.0225
Total	**1.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0223**	**0.0223**	**0.0000**	**0.0000**	**0.0225**

3.3 Grading - 2022

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					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0800e-003	0.0120	5.9400e-003	1.0000e-005		5.2000e-004	5.2000e-004		4.8000e-004	4.8000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2482
Total	**1.0800e-003**	**0.0120**	**5.9400e-003**	**1.0000e-005**	**5.3100e-003**	**5.2000e-004**	**5.8300e-003**	**2.5700e-003**	**4.8000e-004**	**3.0500e-003**	**0.0000**	**1.2381**	**1.2381**	**4.0000e-004**	**0.0000**	**1.2482**

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

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.8000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0714	0.0714	0.0000	0.0000	0.0721
Total	**3.0000e-005**	**2.0000e-005**	**2.8000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0714**	**0.0714**	**0.0000**	**0.0000**	**0.0721**

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					2.3900e-003	0.0000	2.3900e-003	1.1600e-003	0.0000	1.1600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0800e-003	0.0120	5.9400e-003	1.0000e-005		5.2000e-004	5.2000e-004		4.8000e-004	4.8000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2482
Total	**1.0800e-003**	**0.0120**	**5.9400e-003**	**1.0000e-005**	**2.3900e-003**	**5.2000e-004**	**2.9100e-003**	**1.1600e-003**	**4.8000e-004**	**1.6400e-003**	**0.0000**	**1.2381**	**1.2381**	**4.0000e-004**	**0.0000**	**1.2482**

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3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.8000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0714	0.0714	0.0000	0.0000	0.0721
Total	**3.0000e-005**	**2.0000e-005**	**2.8000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0714**	**0.0714**	**0.0000**	**0.0000**	**0.0721**

3.4 Building Construction - 2022

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	0.0343	0.3513	0.3576	5.7000e-004		0.0186	0.0186		0.0171	0.0171	0.0000	50.0739	50.0739	0.0162	0.0000	50.4787
Total	**0.0343**	**0.3513**	**0.3576**	**5.7000e-004**		**0.0186**	**0.0186**		**0.0171**	**0.0171**	**0.0000**	**50.0739**	**50.0739**	**0.0162**	**0.0000**	**50.4787**

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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 - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	2.4400e-003	8.1000e-004	1.0000e-005	3.2000e-004	2.0000e-005	3.4000e-004	9.0000e-005	2.0000e-005	1.1000e-004	0.0000	0.9331	0.9331	3.0000e-005	1.4000e-004	0.9742
Worker	5.0000e-004	4.1000e-004	5.3200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3393	1.3393	4.0000e-005	4.0000e-005	1.3509
Total	**5.9000e-004**	**2.8500e-003**	**6.1300e-003**	**2.0000e-005**	**1.9700e-003**	**3.0000e-005**	**2.0000e-003**	**5.3000e-004**	**3.0000e-005**	**5.6000e-004**	**0.0000**	**2.2724**	**2.2724**	**7.0000e-005**	**1.8000e-004**	**2.3251**

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	0.0343	0.3513	0.3576	5.7000e-004		0.0186	0.0186		0.0171	0.0171	0.0000	50.0738	50.0738	0.0162	0.0000	50.4787
Total	**0.0343**	**0.3513**	**0.3576**	**5.7000e-004**		**0.0186**	**0.0186**		**0.0171**	**0.0171**	**0.0000**	**50.0738**	**50.0738**	**0.0162**	**0.0000**	**50.4787**

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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 - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	2.4400e-003	8.1000e-004	1.0000e-005	3.2000e-004	2.0000e-005	3.4000e-004	9.0000e-005	2.0000e-005	1.1000e-004	0.0000	0.9331	0.9331	3.0000e-005	1.4000e-004	0.9742
Worker	5.0000e-004	4.1000e-004	5.3200e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3393	1.3393	4.0000e-005	4.0000e-005	1.3509
Total	**5.9000e-004**	**2.8500e-003**	**6.1300e-003**	**2.0000e-005**	**1.9700e-003**	**3.0000e-005**	**2.0000e-003**	**5.3000e-004**	**3.0000e-005**	**5.6000e-004**	**0.0000**	**2.2724**	**2.2724**	**7.0000e-005**	**1.8000e-004**	**2.3251**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6200e-003	0.0148	0.0176	3.0000e-005		7.4000e-004	7.4000e-004		6.9000e-004	6.9000e-004	0.0000	2.3492	2.3492	6.8000e-004	0.0000	2.3663
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6200e-003**	**0.0148**	**0.0176**	**3.0000e-005**		**7.4000e-004**	**7.4000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**2.3492**	**2.3492**	**6.8000e-004**	**0.0000**	**2.3663**

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

3.5 Paving - 2022

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	1.5000e-004	1.2000e-004	1.6000e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4018	0.4018	1.0000e-005	1.0000e-005	0.4053
Total	**1.5000e-004**	**1.2000e-004**	**1.6000e-003**	**0.0000**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4018**	**0.4018**	**1.0000e-005**	**1.0000e-005**	**0.4053**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6200e-003	0.0148	0.0176	3.0000e-005		7.4000e-004	7.4000e-004		6.9000e-004	6.9000e-004	0.0000	2.3492	2.3492	6.8000e-004	0.0000	2.3663
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6200e-003**	**0.0148**	**0.0176**	**3.0000e-005**		**7.4000e-004**	**7.4000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**2.3492**	**2.3492**	**6.8000e-004**	**0.0000**	**2.3663**

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

3.5 Paving - 2022

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	1.5000e-004	1.2000e-004	1.6000e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4018	0.4018	1.0000e-005	1.0000e-005	0.4053
Total	**1.5000e-004**	**1.2000e-004**	**1.6000e-003**	**0.0000**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4018**	**0.4018**	**1.0000e-005**	**1.0000e-005**	**0.4053**

3.6 Architectural Coating - 2022

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	7.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**8.1300e-003**	**3.5200e-003**	**4.5300e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

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

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0223	0.0223	0.0000	0.0000	0.0225
Total	**1.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0223**	**0.0223**	**0.0000**	**0.0000**	**0.0225**

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	7.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**8.1300e-003**	**3.5200e-003**	**4.5300e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

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

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0223	0.0223	0.0000	0.0000	0.0225
Total	**1.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0223**	**0.0223**	**0.0000**	**0.0000**	**0.0225**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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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	tons/yr										MT/yr					
Mitigated	0.2131	0.2146	1.6428	2.9300e-003	0.2849	2.7200e-003	0.2876	0.0760	2.5300e-003	0.0786	0.0000	272.3925	272.3925	0.0246	0.0155	277.6296
Unmitigated	0.2131	0.2146	1.6428	2.9300e-003	0.2849	2.7200e-003	0.2876	0.0760	2.5300e-003	0.0786	0.0000	272.3925	272.3925	0.0246	0.0155	277.6296

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	426.00	912.00	912.00	756,655	756,655
Parking Lot	0.00	0.00	0.00		
Total	426.00	912.00	912.00	756,655	756,655

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
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
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
Automobile Care Center	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864
Parking Lot	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864

5.0 Energy Detail

Valley Boulevard Car Wash Project - AQ - South Coast AQMD Air District, Annual

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

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	68.4518	68.4518	5.7800e-003	7.0000e-004	68.8050
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	68.4518	68.4518	5.7800e-003	7.0000e-004	68.8050
NaturalGas Mitigated	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7100e-003	4.7100e-003		4.7100e-003	4.7100e-003	0.0000	67.4145	67.4145	1.2900e-003	1.2400e-003	67.8151
NaturalGas Unmitigated	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7100e-003	4.7100e-003		4.7100e-003	4.7100e-003	0.0000	67.4145	67.4145	1.2900e-003	1.2400e-003	67.8151

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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					
Automobile Care Center	1.2633e+006	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7100e-003	4.7100e-003		4.7100e-003	4.7100e-003	0.0000	67.4145	67.4145	1.2900e-003	1.2400e-003	67.8151
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		**6.8100e-003**	**0.0619**	**0.0520**	**3.7000e-004**		**4.7100e-003**	**4.7100e-003**		**4.7100e-003**	**4.7100e-003**	**0.0000**	**67.4145**	**67.4145**	**1.2900e-003**	**1.2400e-003**	**67.8151**

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					
Automobile Care Center	1.2633e+006	6.8100e-003	0.0619	0.0520	3.7000e-004		4.7100e-003	4.7100e-003		4.7100e-003	4.7100e-003	0.0000	67.4145	67.4145	1.2900e-003	1.2400e-003	67.8151
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		**6.8100e-003**	**0.0619**	**0.0520**	**3.7000e-004**		**4.7100e-003**	**4.7100e-003**		**4.7100e-003**	**4.7100e-003**	**0.0000**	**67.4145**	**67.4145**	**1.2900e-003**	**1.2400e-003**	**67.8151**

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			
Automobile Care Center	384300	68.1539	5.7500e-003	7.0000e-004	68.5055
Parking Lot	1680	0.2979	3.0000e-005	0.0000	0.2995
Total		**68.4518**	**5.7800e-003**	**7.0000e-004**	**68.8050**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	384300	68.1539	5.7500e-003	7.0000e-004	68.5055
Parking Lot	1680	0.2979	3.0000e-005	0.0000	0.2995
Total		**68.4518**	**5.7800e-003**	**7.0000e-004**	**68.8050**

6.0 Area Detail

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

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive 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	0.0119	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004
Unmitigated	0.0119	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004

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	7.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004
Total	**0.0119**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.7000e-004**	**3.7000e-004**	**0.0000**	**0.0000**	**4.0000e-004**

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	7.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0112					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	4.0000e-004
Total	**0.0119**	**0.0000**	**1.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.7000e-004**	**3.7000e-004**	**0.0000**	**0.0000**	**4.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.8123	1.5000e-004	2.0000e-005	1.8216
Unmitigated	2.2654	1.9000e-004	2.0000e-005	2.2771

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0 / 1.14975	2.2654	1.9000e-004	2.0000e-005	2.2771
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**2.2654**	**1.9000e-004**	**2.0000e-005**	**2.2771**

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

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0 / 0.9198	1.8123	1.5000e-004	2.0000e-005	1.8216
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.8123**	**1.5000e-004**	**2.0000e-005**	**1.8216**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.3263	0.1375	0.0000	5.7633
Unmitigated	2.3263	0.1375	0.0000	5.7633

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	11.46	2.3263	0.1375	0.0000	5.7633
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**2.3263**	**0.1375**	**0.0000**	**5.7633**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	11.46	2.3263	0.1375	0.0000	5.7633
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**2.3263**	**0.1375**	**0.0000**	**5.7633**

9.0 Operational Offroad

Valley Boulevard Car Wash Project - AQ - South Coast AQMD Air District, Annual

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

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

Valley Boulevard Car Wash Project - AQ

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	12.00	Space	0.00	4,800.00	0
Automobile Care Center	3.00	1000sqft	0.40	3,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on project's site plans.

Construction Phase -

Demolition -

Architectural Coating - Based on SCAQMD Rule 1113 Architectural Coating.

Vehicle Trips - A peak hour traffic of 14.2 and 30.4 for weekday and saturday, respectively, in the traffic memo to calculate average daily trips (ADT). Assuming peak hour traffic is 10% of ADT per 1,000 square feet. Assuming Sunday trip rate as Saturday.

Area Coating - Based on SCAQMD Rule 1113 Architectural Coating

Energy Use - Energy assumption for Car Wash Projects using Professional Car Washing survey in 2015 and U.S. Energy Information Administration electricity conversion. Divide KWhr/yr and KBTU/yr to square feet of the project (3,000 sq feet)

Water And Wastewater - Based off project's Site Plan Car Wash Water Usage of 525 gallons per day and 175 cars at 15 gallons per car.

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

Valley Boulevard Car Wash Project - AQ - South Coast AQMD Air District, Summer

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

Area Mitigation - Based on SCAQMD Rule 1113 Architectural Coating

Water Mitigation -

Operational Off-Road Equipment -

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	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblEnergyUse	NT24E	5.75	125.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	T24E	2.01	0.00
tblEnergyUse	T24NG	13.51	421.10
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	0.07	0.40
tblVehicleTrips	ST_TR	23.72	304.00
tblVehicleTrips	SU_TR	11.88	304.00
tblVehicleTrips	WD_TR	23.72	142.00
tblWater	IndoorWaterUseRate	282,243.32	0.00
tblWater	OutdoorWaterUseRate	172,987.84	1,149,750.00

2.0 Emissions Summary

Valley Boulevard Car Wash Project - AQ - 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					
2022	3.2560	12.0240	7.7218	0.0149	5.4014	0.5178	5.9192	2.5923	0.4764	3.0687	0.0000	1,447.1516	1,447.1516	0.4436	4.4000e-003	1,458.8235
Maximum	**3.2560**	**12.0240**	**7.7218**	**0.0149**	**5.4014**	**0.5178**	**5.9192**	**2.5923**	**0.4764**	**3.0687**	**0.0000**	**1,447.1516**	**1,447.1516**	**0.4436**	**4.4000e-003**	**1,458.8235**

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					
2022	3.2560	12.0240	7.7218	0.0149	2.4798	0.5178	2.9976	1.1796	0.4764	1.6560	0.0000	1,447.1516	1,447.1516	0.4436	4.4000e-003	1,458.8235
Maximum	**3.2560**	**12.0240**	**7.7218**	**0.0149**	**2.4798**	**0.5178**	**2.9976**	**1.1796**	**0.4764**	**1.6560**	**0.0000**	**1,447.1516**	**1,447.1516**	**0.4436**	**4.4000e-003**	**1,458.8235**

	ROG	NOx	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**	**54.09**	**0.00**	**49.36**	**54.50**	**0.00**	**46.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Valley Boulevard Car Wash Project - AQ - 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	0.0654	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Energy	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075
Mobile	2.0385	1.7629	14.4976	0.0269	2.5743	0.0241	2.5984	0.6860	0.0225	0.7085		2,760.1021	2,760.1021	0.2288	0.1452	2,809.0970
Total	**2.1412**	**2.1023**	**14.7842**	**0.0290**	**2.5743**	**0.0499**	**2.6242**	**0.6860**	**0.0483**	**0.7343**		**3,167.2931**	**3,167.2931**	**0.2366**	**0.1527**	**3,218.7080**

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	0.0654	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Energy	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075
Mobile	2.0385	1.7629	14.4976	0.0269	2.5743	0.0241	2.5984	0.6860	0.0225	0.7085		2,760.1021	2,760.1021	0.2288	0.1452	2,809.0970
Total	**2.1412**	**2.1023**	**14.7842**	**0.0290**	**2.5743**	**0.0499**	**2.6242**	**0.6860**	**0.0483**	**0.7343**		**3,167.2931**	**3,167.2931**	**0.2366**	**0.1527**	**3,218.7080**

Valley Boulevard Car Wash Project - AQ - 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	6/1/2022	6/1/2022	5	1	
2	Grading	Grading	6/2/2022	6/3/2022	5	2	
3	Building Construction	Building Construction	6/4/2022	10/21/2022	5	100	
4	Paving	Paving	10/22/2022	10/28/2022	5	5	
5	Architectural Coating	Architectural Coating	10/29/2022	11/4/2022	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,500; Non-Residential Outdoor: 1,500; Striped Parking Area: 288 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29

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

Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	3.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Valley Boulevard Car Wash Project - AQ - 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 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.5303**	**0.2573**	**0.7876**	**0.0573**	**0.2367**	**0.2940**		**942.5179**	**942.5179**	**0.3048**		**950.1386**

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	0.0172	0.0121	0.1909	5.1000e-004	0.0559	3.3000e-004	0.0562	0.0148	3.1000e-004	0.0151		51.4574	51.4574	1.3400e-003	1.2200e-003	51.8553
Total	**0.0172**	**0.0121**	**0.1909**	**5.1000e-004**	**0.0559**	**3.3000e-004**	**0.0562**	**0.0148**	**3.1000e-004**	**0.0151**		**51.4574**	**51.4574**	**1.3400e-003**	**1.2200e-003**	**51.8553**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

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					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.2386**	**0.2573**	**0.4959**	**0.0258**	**0.2367**	**0.2625**	**0.0000**	**942.5179**	**942.5179**	**0.3048**		**950.1386**

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	0.0172	0.0121	0.1909	5.1000e-004	0.0559	3.3000e-004	0.0562	0.0148	3.1000e-004	0.0151		51.4574	51.4574	1.3400e-003	1.2200e-003	51.8553
Total	**0.0172**	**0.0121**	**0.1909**	**5.1000e-004**	**0.0559**	**3.3000e-004**	**0.0562**	**0.0148**	**3.1000e-004**	**0.0151**		**51.4574**	**51.4574**	**1.3400e-003**	**1.2200e-003**	**51.8553**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

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					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**5.3119**	**0.5173**	**5.8292**	**2.5686**	**0.4759**	**3.0445**		**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

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	0.0276	0.0194	0.3054	8.1000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		82.3318	82.3318	2.1400e-003	1.9600e-003	82.9685
Total	**0.0276**	**0.0194**	**0.3054**	**8.1000e-004**	**0.0894**	**5.3000e-004**	**0.0900**	**0.0237**	**4.9000e-004**	**0.0242**		**82.3318**	**82.3318**	**2.1400e-003**	**1.9600e-003**	**82.9685**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3904	0.0000	2.3904	1.1559	0.0000	1.1559			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**2.3904**	**0.5173**	**2.9077**	**1.1559**	**0.4759**	**1.6318**	**0.0000**	**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

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	0.0276	0.0194	0.3054	8.1000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		82.3318	82.3318	2.1400e-003	1.9600e-003	82.9685
Total	**0.0276**	**0.0194**	**0.3054**	**8.1000e-004**	**0.0894**	**5.3000e-004**	**0.0900**	**0.0237**	**4.9000e-004**	**0.0242**		**82.3318**	**82.3318**	**2.1400e-003**	**1.9600e-003**	**82.9685**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

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	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**		**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

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	1.8200e-003	0.0465	0.0160	1.9000e-004	6.4000e-003	4.9000e-004	6.8900e-003	1.8400e-003	4.7000e-004	2.3100e-003		20.5669	20.5669	6.9000e-004	2.9800e-003	21.4727
Worker	0.0103	7.2700e-003	0.1145	3.0000e-004	0.0335	2.0000e-004	0.0337	8.8900e-003	1.8000e-004	9.0800e-003		30.8744	30.8744	8.0000e-004	7.3000e-004	31.1132
Total	**0.0122**	**0.0538**	**0.1305**	**4.9000e-004**	**0.0399**	**6.9000e-004**	**0.0406**	**0.0107**	**6.5000e-004**	**0.0114**		**51.4413**	**51.4413**	**1.4900e-003**	**3.7100e-003**	**52.5859**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

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	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422	0.0000	1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**	**0.0000**	**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

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	1.8200e-003	0.0465	0.0160	1.9000e-004	6.4000e-003	4.9000e-004	6.8900e-003	1.8400e-003	4.7000e-004	2.3100e-003		20.5669	20.5669	6.9000e-004	2.9800e-003	21.4727
Worker	0.0103	7.2700e-003	0.1145	3.0000e-004	0.0335	2.0000e-004	0.0337	8.8900e-003	1.8000e-004	9.0800e-003		30.8744	30.8744	8.0000e-004	7.3000e-004	31.1132
Total	**0.0122**	**0.0538**	**0.1305**	**4.9000e-004**	**0.0399**	**6.9000e-004**	**0.0406**	**0.0107**	**6.5000e-004**	**0.0114**		**51.4413**	**51.4413**	**1.4900e-003**	**3.7100e-003**	**52.5859**

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

3.5 Paving - 2022

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	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758		1,035.8246	1,035.8246	0.3017		1,043.3677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6469**	**5.9174**	**7.0348**	**0.0113**		**0.2961**	**0.2961**		**0.2758**	**0.2758**		**1,035.8246**	**1,035.8246**	**0.3017**		**1,043.3677**

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	0.0620	0.0436	0.6871	1.8200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		185.2465	185.2465	4.8100e-003	4.4000e-003	186.6790
Total	**0.0620**	**0.0436**	**0.6871**	**1.8200e-003**	**0.2012**	**1.2000e-003**	**0.2024**	**0.0534**	**1.1100e-003**	**0.0545**		**185.2465**	**185.2465**	**4.8100e-003**	**4.4000e-003**	**186.6790**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

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	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758	0.0000	1,035.8246	1,035.8246	0.3017		1,043.3677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6469**	**5.9174**	**7.0348**	**0.0113**		**0.2961**	**0.2961**		**0.2758**	**0.2758**	**0.0000**	**1,035.8246**	**1,035.8246**	**0.3017**		**1,043.3677**

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	0.0620	0.0436	0.6871	1.8200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		185.2465	185.2465	4.8100e-003	4.4000e-003	186.6790
Total	**0.0620**	**0.0436**	**0.6871**	**1.8200e-003**	**0.2012**	**1.2000e-003**	**0.2024**	**0.0534**	**1.1100e-003**	**0.0545**		**185.2465**	**185.2465**	**4.8100e-003**	**4.4000e-003**	**186.6790**

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

3.6 Architectural Coating - 2022

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	3.0480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**3.2525**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	3.4400e-003	2.4200e-003	0.0382	1.0000e-004	0.0112	7.0000e-005	0.0112	2.9600e-003	6.0000e-005	3.0300e-003		10.2915	10.2915	2.7000e-004	2.4000e-004	10.3711
Total	**3.4400e-003**	**2.4200e-003**	**0.0382**	**1.0000e-004**	**0.0112**	**7.0000e-005**	**0.0112**	**2.9600e-003**	**6.0000e-005**	**3.0300e-003**		**10.2915**	**10.2915**	**2.7000e-004**	**2.4000e-004**	**10.3711**

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

3.6 Architectural Coating - 2022

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	3.0480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**3.2525**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	3.4400e-003	2.4200e-003	0.0382	1.0000e-004	0.0112	7.0000e-005	0.0112	2.9600e-003	6.0000e-005	3.0300e-003		10.2915	10.2915	2.7000e-004	2.4000e-004	10.3711
Total	**3.4400e-003**	**2.4200e-003**	**0.0382**	**1.0000e-004**	**0.0112**	**7.0000e-005**	**0.0112**	**2.9600e-003**	**6.0000e-005**	**3.0300e-003**		**10.2915**	**10.2915**	**2.7000e-004**	**2.4000e-004**	**10.3711**

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	2.0385	1.7629	14.4976	0.0269	2.5743	0.0241	2.5984	0.6860	0.0225	0.7085		2,760.1021	2,760.1021	0.2288	0.1452	2,809.0970
Unmitigated	2.0385	1.7629	14.4976	0.0269	2.5743	0.0241	2.5984	0.6860	0.0225	0.7085		2,760.1021	2,760.1021	0.2288	0.1452	2,809.0970

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	426.00	912.00	912.00	756,655	756,655
Parking Lot	0.00	0.00	0.00		
Total	426.00	912.00	912.00	756,655	756,655

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
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
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
Automobile Care Center	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864
Parking Lot	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864

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	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075
NaturalGas Unmitigated	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075

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					
Automobile Care Center	3461.1	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075
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		**0.0373**	**0.3393**	**0.2850**	**2.0400e-003**		**0.0258**	**0.0258**		**0.0258**	**0.0258**		**407.1878**	**407.1878**	**7.8000e-003**	**7.4700e-003**	**409.6075**

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					
Automobile Care Center	3.4611	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075
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		**0.0373**	**0.3393**	**0.2850**	**2.0400e-003**		**0.0258**	**0.0258**		**0.0258**	**0.0258**		**407.1878**	**407.1878**	**7.8000e-003**	**7.4700e-003**	**409.6075**

6.0 Area Detail

Valley Boulevard Car Wash Project - AQ - South Coast AQMD Air District, Summer

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

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0654	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Unmitigated	0.0654	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-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	lb/day										lb/day					
Architectural Coating	4.1800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Total	**0.0654**	**1.0000e-005**	**1.5300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.5000e-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	lb/day										lb/day					
Architectural Coating	4.1800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Total	**0.0654**	**1.0000e-005**	**1.5300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.5000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Valley Boulevard Car Wash Project - AQ - South Coast AQMD Air District, Winter

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

Valley Boulevard Car Wash Project - AQ

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	12.00	Space	0.00	4,800.00	0
Automobile Care Center	3.00	1000sqft	0.40	3,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on project's site plans.

Construction Phase -

Demolition -

Architectural Coating - Based on SCAQMD Rule 1113 Architectural Coating.

Vehicle Trips - A peak hour traffic of 14.2 and 30.4 for weekday and saturday, respectively, in the traffic memo to calculate average daily trips (ADT). Assuming peak hour traffic is 10% of ADT per 1,000 square feet. Assuming Sunday trip rate as Saturday.

Area Coating - Based on SCAQMD Rule 1113 Architectural Coating

Energy Use - Energy assumption for Car Wash Projects using Professional Car Washing survey in 2015 and U.S. Energy Information Administration electricity conversion. Divide KWhr/yr and KBTU/yr to square feet of the project (3,000 sq feet)

Water And Wastewater - Based off project's Site Plan Car Wash Water Usage of 525 gallons per day and 175 cars at 15 gallons per car.

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

Valley Boulevard Car Wash Project - AQ - South Coast AQMD Air District, Winter

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

Area Mitigation - Based on SCAQMD Rule 1113 Architectural Coating

Water Mitigation -

Operational Off-Road Equipment -

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	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblEnergyUse	NT24E	5.75	125.00
tblEnergyUse	NT24NG	4.45	0.00
tblEnergyUse	T24E	2.01	0.00
tblEnergyUse	T24NG	13.51	421.10
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	0.07	0.40
tblVehicleTrips	ST_TR	23.72	304.00
tblVehicleTrips	SU_TR	11.88	304.00
tblVehicleTrips	WD_TR	23.72	142.00
tblWater	IndoorWaterUseRate	282,243.32	0.00
tblWater	OutdoorWaterUseRate	172,987.84	1,149,750.00

2.0 Emissions Summary

Valley Boulevard Car Wash Project - AQ - 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					
2022	3.2561	12.0258	7.6559	0.0149	5.4014	0.5178	5.9192	2.5923	0.4764	3.0687	0.0000	1,442.3642	1,442.3642	0.4436	4.6700e-003	1,454.0725
Maximum	**3.2561**	**12.0258**	**7.6559**	**0.0149**	**5.4014**	**0.5178**	**5.9192**	**2.5923**	**0.4764**	**3.0687**	**0.0000**	**1,442.3642**	**1,442.3642**	**0.4436**	**4.6700e-003**	**1,454.0725**

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					
2022	3.2561	12.0258	7.6559	0.0149	2.4798	0.5178	2.9976	1.1796	0.4764	1.6560	0.0000	1,442.3642	1,442.3642	0.4436	4.6700e-003	1,454.0725
Maximum	**3.2561**	**12.0258**	**7.6559**	**0.0149**	**2.4798**	**0.5178**	**2.9976**	**1.1796**	**0.4764**	**1.6560**	**0.0000**	**1,442.3642**	**1,442.3642**	**0.4436**	**4.6700e-003**	**1,454.0725**

	ROG	NOx	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**	**54.09**	**0.00**	**49.36**	**54.50**	**0.00**	**46.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Valley Boulevard Car Wash Project - AQ - South Coast AQMD Air District, Winter

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

2.2 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	0.0654	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Energy	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075
Mobile	1.9340	1.8893	14.5173	0.0257	2.5743	0.0241	2.5984	0.6860	0.0225	0.7085		2,636.0868	2,636.0868	0.2425	0.1515	2,687.3096
Total	**2.0368**	**2.2286**	**14.8038**	**0.0278**	**2.5743**	**0.0499**	**2.6242**	**0.6860**	**0.0483**	**0.7343**		**3,043.2778**	**3,043.2778**	**0.2503**	**0.1590**	**3,096.9206**

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	0.0654	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Energy	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075
Mobile	1.9340	1.8893	14.5173	0.0257	2.5743	0.0241	2.5984	0.6860	0.0225	0.7085		2,636.0868	2,636.0868	0.2425	0.1515	2,687.3096
Total	**2.0368**	**2.2286**	**14.8038**	**0.0278**	**2.5743**	**0.0499**	**2.6242**	**0.6860**	**0.0483**	**0.7343**		**3,043.2778**	**3,043.2778**	**0.2503**	**0.1590**	**3,096.9206**

Valley Boulevard Car Wash Project - AQ - 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	6/1/2022	6/1/2022	5	1	
2	Grading	Grading	6/2/2022	6/3/2022	5	2	
3	Building Construction	Building Construction	6/4/2022	10/21/2022	5	100	
4	Paving	Paving	10/22/2022	10/28/2022	5	5	
5	Architectural Coating	Architectural Coating	10/29/2022	11/4/2022	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,500; Non-Residential Outdoor: 1,500; Striped Parking Area: 288 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29

Valley Boulevard Car Wash Project - AQ - South Coast AQMD Air District, Winter

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

Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	3.00	1.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Valley Boulevard Car Wash Project - AQ - 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 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.5303**	**0.2573**	**0.7876**	**0.0573**	**0.2367**	**0.2940**		**942.5179**	**942.5179**	**0.3048**		**950.1386**

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	0.0181	0.0133	0.1725	4.8000e-004	0.0559	3.3000e-004	0.0562	0.0148	3.1000e-004	0.0151		48.4653	48.4653	1.3500e-003	1.3000e-003	48.8859
Total	**0.0181**	**0.0133**	**0.1725**	**4.8000e-004**	**0.0559**	**3.3000e-004**	**0.0562**	**0.0148**	**3.1000e-004**	**0.0151**		**48.4653**	**48.4653**	**1.3500e-003**	**1.3000e-003**	**48.8859**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

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					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.2386**	**0.2573**	**0.4959**	**0.0258**	**0.2367**	**0.2625**	**0.0000**	**942.5179**	**942.5179**	**0.3048**		**950.1386**

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	0.0181	0.0133	0.1725	4.8000e-004	0.0559	3.3000e-004	0.0562	0.0148	3.1000e-004	0.0151		48.4653	48.4653	1.3500e-003	1.3000e-003	48.8859
Total	**0.0181**	**0.0133**	**0.1725**	**4.8000e-004**	**0.0559**	**3.3000e-004**	**0.0562**	**0.0148**	**3.1000e-004**	**0.0151**		**48.4653**	**48.4653**	**1.3500e-003**	**1.3000e-003**	**48.8859**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

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					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**5.3119**	**0.5173**	**5.8292**	**2.5686**	**0.4759**	**3.0445**		**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

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	0.0290	0.0212	0.2761	7.6000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		77.5444	77.5444	2.1600e-003	2.0800e-003	78.2174
Total	**0.0290**	**0.0212**	**0.2761**	**7.6000e-004**	**0.0894**	**5.3000e-004**	**0.0900**	**0.0237**	**4.9000e-004**	**0.0242**		**77.5444**	**77.5444**	**2.1600e-003**	**2.0800e-003**	**78.2174**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3904	0.0000	2.3904	1.1559	0.0000	1.1559			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**2.3904**	**0.5173**	**2.9077**	**1.1559**	**0.4759**	**1.6318**	**0.0000**	**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

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	0.0290	0.0212	0.2761	7.6000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		77.5444	77.5444	2.1600e-003	2.0800e-003	78.2174
Total	**0.0290**	**0.0212**	**0.2761**	**7.6000e-004**	**0.0894**	**5.3000e-004**	**0.0900**	**0.0237**	**4.9000e-004**	**0.0242**		**77.5444**	**77.5444**	**2.1600e-003**	**2.0800e-003**	**78.2174**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

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	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**		**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

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	1.7900e-003	0.0486	0.0165	1.9000e-004	6.4000e-003	4.9000e-004	6.8900e-003	1.8400e-003	4.7000e-004	2.3100e-003		20.5772	20.5772	6.9000e-004	2.9900e-003	21.4841
Worker	0.0109	7.9500e-003	0.1035	2.9000e-004	0.0335	2.0000e-004	0.0337	8.8900e-003	1.8000e-004	9.0800e-003		29.0792	29.0792	8.1000e-004	7.8000e-004	29.3315
Total	**0.0127**	**0.0565**	**0.1201**	**4.8000e-004**	**0.0399**	**6.9000e-004**	**0.0406**	**0.0107**	**6.5000e-004**	**0.0114**		**49.6564**	**49.6564**	**1.5000e-003**	**3.7700e-003**	**50.8157**

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

3.4 Building Construction - 2022

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	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422	0.0000	1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**	**0.0000**	**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

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	1.7900e-003	0.0486	0.0165	1.9000e-004	6.4000e-003	4.9000e-004	6.8900e-003	1.8400e-003	4.7000e-004	2.3100e-003		20.5772	20.5772	6.9000e-004	2.9900e-003	21.4841
Worker	0.0109	7.9500e-003	0.1035	2.9000e-004	0.0335	2.0000e-004	0.0337	8.8900e-003	1.8000e-004	9.0800e-003		29.0792	29.0792	8.1000e-004	7.8000e-004	29.3315
Total	**0.0127**	**0.0565**	**0.1201**	**4.8000e-004**	**0.0399**	**6.9000e-004**	**0.0406**	**0.0107**	**6.5000e-004**	**0.0114**		**49.6564**	**49.6564**	**1.5000e-003**	**3.7700e-003**	**50.8157**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

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	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758		1,035.8246	1,035.8246	0.3017		1,043.3677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6469**	**5.9174**	**7.0348**	**0.0113**		**0.2961**	**0.2961**		**0.2758**	**0.2758**		**1,035.8246**	**1,035.8246**	**0.3017**		**1,043.3677**

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	0.0652	0.0477	0.6211	1.7200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		174.4750	174.4750	4.8700e-003	4.6700e-003	175.9891
Total	**0.0652**	**0.0477**	**0.6211**	**1.7200e-003**	**0.2012**	**1.2000e-003**	**0.2024**	**0.0534**	**1.1100e-003**	**0.0545**		**174.4750**	**174.4750**	**4.8700e-003**	**4.6700e-003**	**175.9891**

Valley Boulevard Car Wash Project - AQ - 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 - 2022

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	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758	0.0000	1,035.8246	1,035.8246	0.3017		1,043.3677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6469**	**5.9174**	**7.0348**	**0.0113**		**0.2961**	**0.2961**		**0.2758**	**0.2758**	**0.0000**	**1,035.8246**	**1,035.8246**	**0.3017**		**1,043.3677**

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	0.0652	0.0477	0.6211	1.7200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		174.4750	174.4750	4.8700e-003	4.6700e-003	175.9891
Total	**0.0652**	**0.0477**	**0.6211**	**1.7200e-003**	**0.2012**	**1.2000e-003**	**0.2024**	**0.0534**	**1.1100e-003**	**0.0545**		**174.4750**	**174.4750**	**4.8700e-003**	**4.6700e-003**	**175.9891**

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

3.6 Architectural Coating - 2022

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	3.0480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**3.2525**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	3.6200e-003	2.6500e-003	0.0345	1.0000e-004	0.0112	7.0000e-005	0.0112	2.9600e-003	6.0000e-005	3.0300e-003		9.6931	9.6931	2.7000e-004	2.6000e-004	9.7772
Total	**3.6200e-003**	**2.6500e-003**	**0.0345**	**1.0000e-004**	**0.0112**	**7.0000e-005**	**0.0112**	**2.9600e-003**	**6.0000e-005**	**3.0300e-003**		**9.6931**	**9.6931**	**2.7000e-004**	**2.6000e-004**	**9.7772**

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

3.6 Architectural Coating - 2022

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	3.0480					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**3.2525**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	3.6200e-003	2.6500e-003	0.0345	1.0000e-004	0.0112	7.0000e-005	0.0112	2.9600e-003	6.0000e-005	3.0300e-003		9.6931	9.6931	2.7000e-004	2.6000e-004	9.7772
Total	**3.6200e-003**	**2.6500e-003**	**0.0345**	**1.0000e-004**	**0.0112**	**7.0000e-005**	**0.0112**	**2.9600e-003**	**6.0000e-005**	**3.0300e-003**		**9.6931**	**9.6931**	**2.7000e-004**	**2.6000e-004**	**9.7772**

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	1.9340	1.8893	14.5173	0.0257	2.5743	0.0241	2.5984	0.6860	0.0225	0.7085		2,636.0868	2,636.0868	0.2425	0.1515	2,687.3096
Unmitigated	1.9340	1.8893	14.5173	0.0257	2.5743	0.0241	2.5984	0.6860	0.0225	0.7085		2,636.0868	2,636.0868	0.2425	0.1515	2,687.3096

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	426.00	912.00	912.00	756,655	756,655
Parking Lot	0.00	0.00	0.00		
Total	426.00	912.00	912.00	756,655	756,655

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
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
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
Automobile Care Center	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864
Parking Lot	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864

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	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075
NaturalGas Unmitigated	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075

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					
Automobile Care Center	3461.1	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075
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		**0.0373**	**0.3393**	**0.2850**	**2.0400e-003**		**0.0258**	**0.0258**		**0.0258**	**0.0258**		**407.1878**	**407.1878**	**7.8000e-003**	**7.4700e-003**	**409.6075**

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					
Automobile Care Center	3.4611	0.0373	0.3393	0.2850	2.0400e-003		0.0258	0.0258		0.0258	0.0258		407.1878	407.1878	7.8000e-003	7.4700e-003	409.6075
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		**0.0373**	**0.3393**	**0.2850**	**2.0400e-003**		**0.0258**	**0.0258**		**0.0258**	**0.0258**		**407.1878**	**407.1878**	**7.8000e-003**	**7.4700e-003**	**409.6075**

6.0 Area Detail

Valley Boulevard Car Wash Project - AQ - South Coast AQMD Air District, Winter

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

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0654	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Unmitigated	0.0654	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-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	lb/day										lb/day					
Architectural Coating	4.1800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Total	**0.0654**	**1.0000e-005**	**1.5300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.5000e-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	lb/day										lb/day					
Architectural Coating	4.1800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4000e-004	1.0000e-005	1.5300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.2800e-003	3.2800e-003	1.0000e-005		3.5000e-003
Total	**0.0654**	**1.0000e-005**	**1.5300e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.2800e-003**	**3.2800e-003**	**1.0000e-005**		**3.5000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

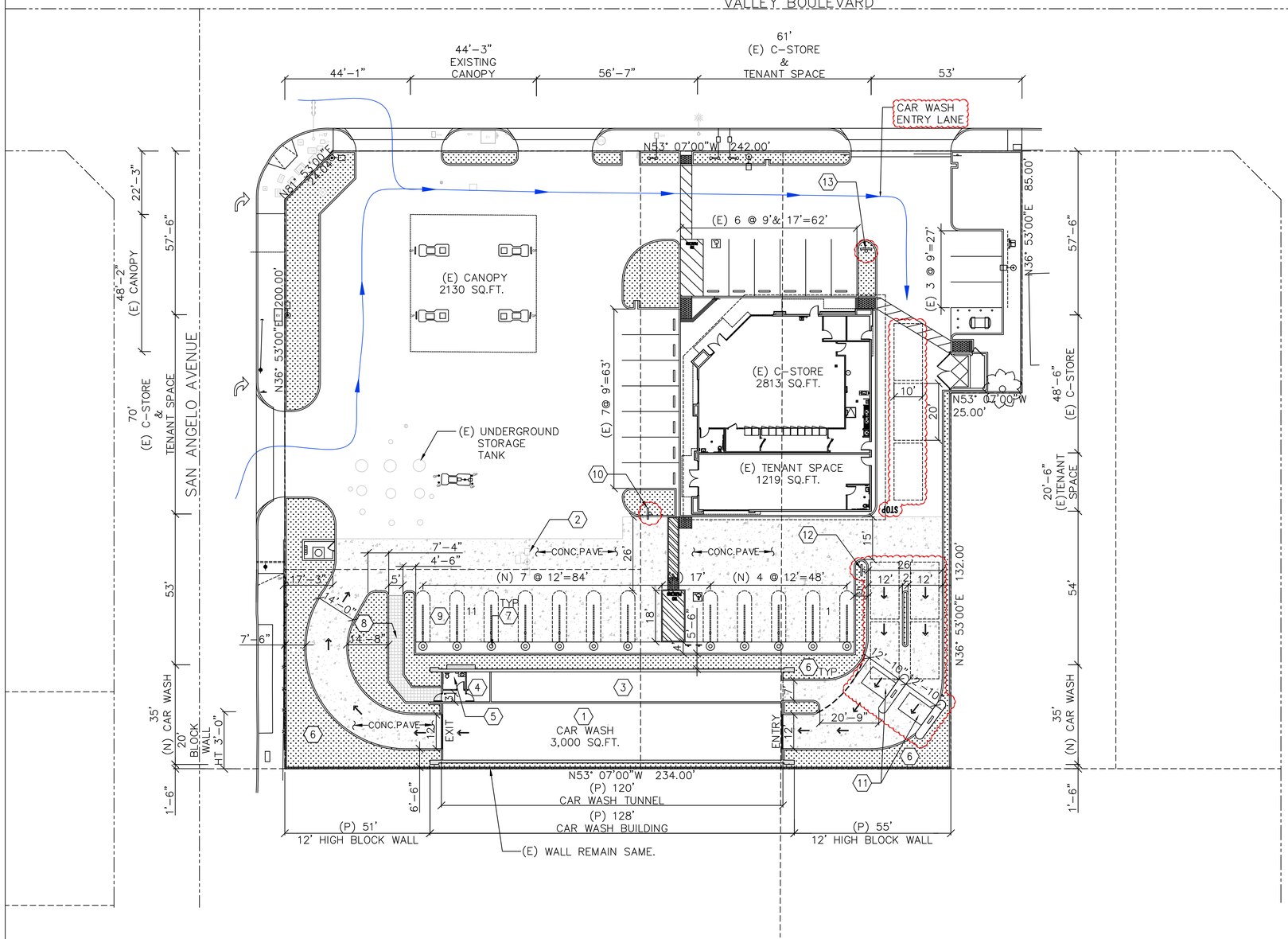
User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Project Site Plans



PROPOSED SITE PLAN

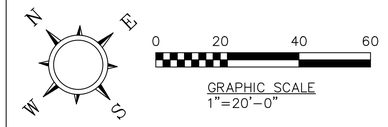
SCALE: 1"=20'-0"

CARWASH WATER USAGE

CARWASH REQUIRES
525 GALLONS / DAY
175 CARS AT 15 GALLONS/CAR

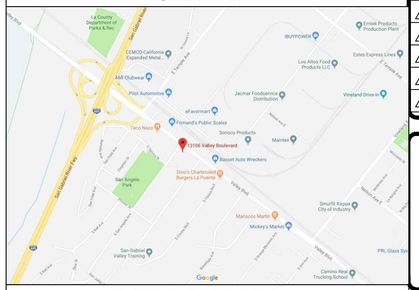
1

DIRECTIONAL ARROW/ GRAPHIC SCALE



GRAPHIC SCALE
1"=20'-0"

VICINITY MAP



SITE INFORMATION

ITEM	SIZE	LOT %	AREA (SQ.FT.)
TOTAL LOT AREA	N/A	N/A	52,761
(E) C-STORE	48'-6"x61'-0"	5.331	2,813
(E) TENANT SPACE	20'-6"x61'-0"	2.310	1,219
(E) CANOPY	48'-2"x44'-3.5"	4.037	2,130
(N) CAR WASH	35'-0"x108'-0"	6.254	3,300
(E) LANDSCAPE AREA		8.214	4,334
(N) LANDSCAPE AREA		10.289	5,429

SITE ADDRESS : 13106 VALLEY BLVD
LA PUENTE, CA 91746

TOTAL AREA: 52,761 SQ.FT. (1.21 ACRES)

ASSESSOR'S PARCEL NO.: 8110-011-053,
8110-011-037,
8110-011-038.

PARKING:

PARKING REQUIREMENTS:

NEW CARWASH: 1:250 SQ.FT. =3,000:250
=12 SPACES

TOTAL REQUIRED: =12 SPACES

PARKING PROVIDED:

TOTAL OF 1 (17'x18'-VACUUM HANDICAP PARKING)
10 (12'X18' VACUUM PARKING)
01 (12'X18' FUTURE EV PARKING)

TOTAL PROVIDED: 12 SPACES

SCOPE OF WORK

1. CONSTRUCT (N) 100'-0"X33'-0" CAR WASH.
2. REMOVE EXISTING AREA LIGHT.
3. (N) EQUIPMENT ROOM.
4. (N) OFFICE ROOM.
5. (N) UNISEX RESTROOM.
6. (N) PLANTER.
7. (N) VACUUM WITH SHADED CANOPY ON TOP.
8. (N) WALKWAY.
9. FUTURE CLEAN AIR/EV PARKING SPACE.
10. NEW "NO CAR WASH ENTRY" SIGN.
11. NEW POS CANOPY.
12. NEW "DO NOT ENTER" SIGN.
13. NEW CAR WASH "ENTRY" SIGN.

NOTE:
EXISTING WILL REMAIN THE SAME UNLESS OTHERWISE NOTED.

REVISIONS	BY
1 05/26/2021	IJ
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PLANS PREPARED BY:
A & S ENGINEERING INC.
PLANNING, ENGINEERING, CONSTRUCTION MANAGEMENT
28405 SAND CANYON RD., SUITE "B"
CANYON COUNTRY, CA 91387
PHONE #: (661)250-9300 FAX #: (661) 250-9333

INDEPENDENT STATION

ADDRESS
STORE #:
ADDRESS: 13106 VALLEY BLVD.
LA PUENTE, CA 91746

DRAWN	IJ
CHECKED	–
DATE	03/21/2019
SHT. TITLE	SITE PLAN
JOB NO.	–
SHEET	S1.0