Bloomington Commercial Center Project

Air Quality and Greenhouse Gas Emissions Study

prepared for

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1 Project Description and Impact Summary

1.1 Introduction

This study analyzes the potential air quality and greenhouse gas (GHG) emissions impacts of the proposed Bloomington Commercial Center Project (project) in the community of Bloomington, San Bernardino County, California. Rincon Consultants, Inc. (Rincon) prepared this in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). The purpose of this study is to analyze the project's air quality and greenhouse gas (GHG) emissions impacts related to both temporary construction activity and long-term operation of the project. Table 1 provides a summary of project impacts.

Table 1 - Summary of Impacts

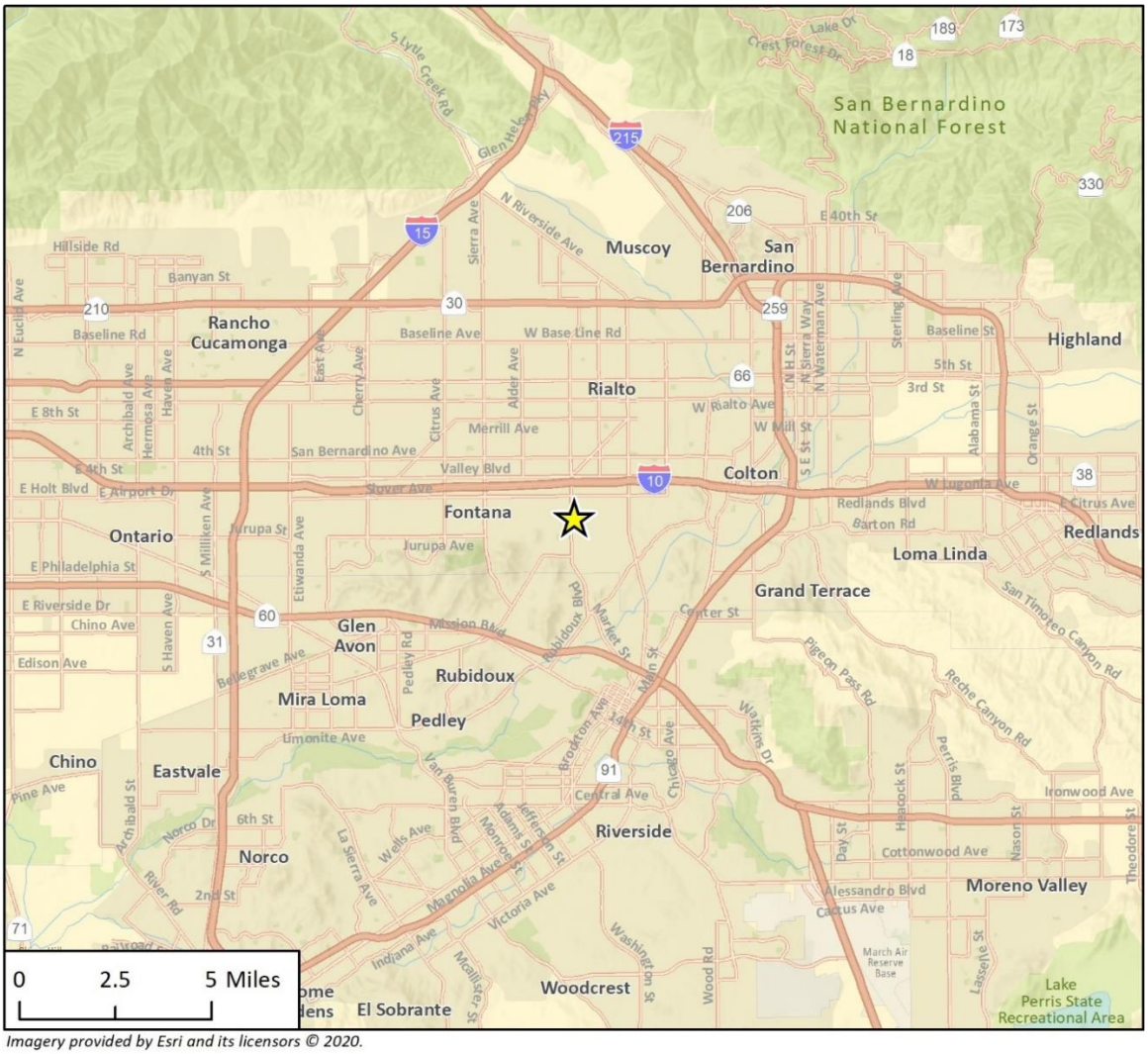
Impact Statement	Proposed Project's Level of Significance	Applicable Recommendations
Air Quality		
Conflict with or obstruct implementation of the applicable air quality plan?	Less than significant impact	None
Result in a cumulatively considerable net increase of any criteria pollutant for which the 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 with mitigation	Mitigation Measure GHG-1
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than significant impact with mitigation	Mitigation Measure GHG-1

1.2 Project Summary

Project Location

The project site is located on the southeast corner of Santa Ana Avenue and Cedar Avenue in the unincorporated community of Bloomington within the County of San Bernardino (County). The project site is located within the City of Rialto Sphere of Influence and is zoned Bloomington/Single Residential one-acre minimum/Additional Agriculture (BL/RS-1-AA) per the County of San Bernardino Development Code. The approximately 8.9-acre project site is currently vacant and is bounded by Santa Ana Avenue and a mobile home park to the north, vacant land to the east and south, and Cedar Avenue and commercial uses to the west. The project local study area is shown in Figure 1.

Figure 1 Regional Location



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Project Location

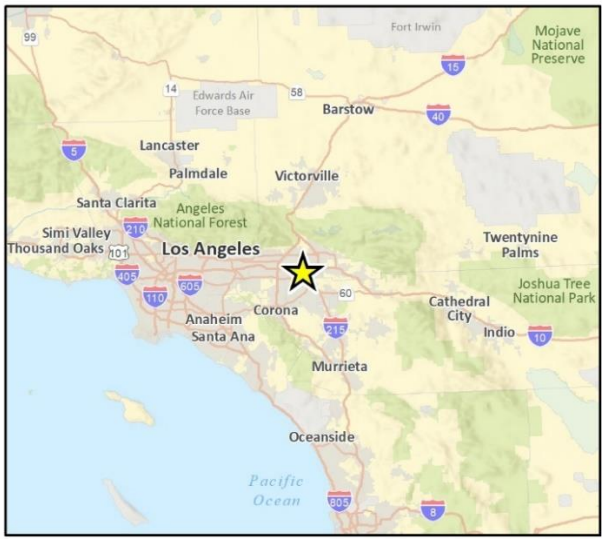

Figure 2 Project Location

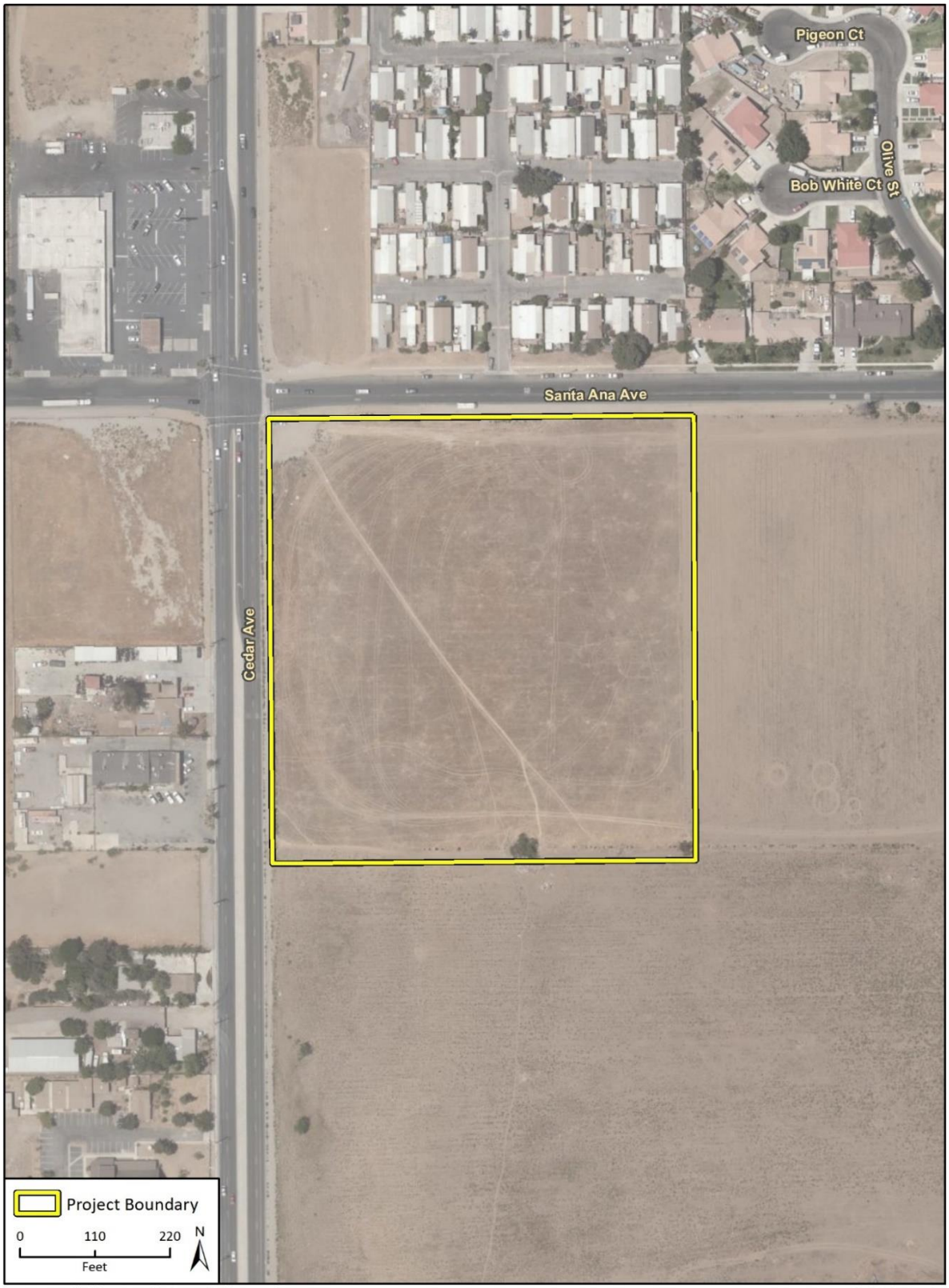

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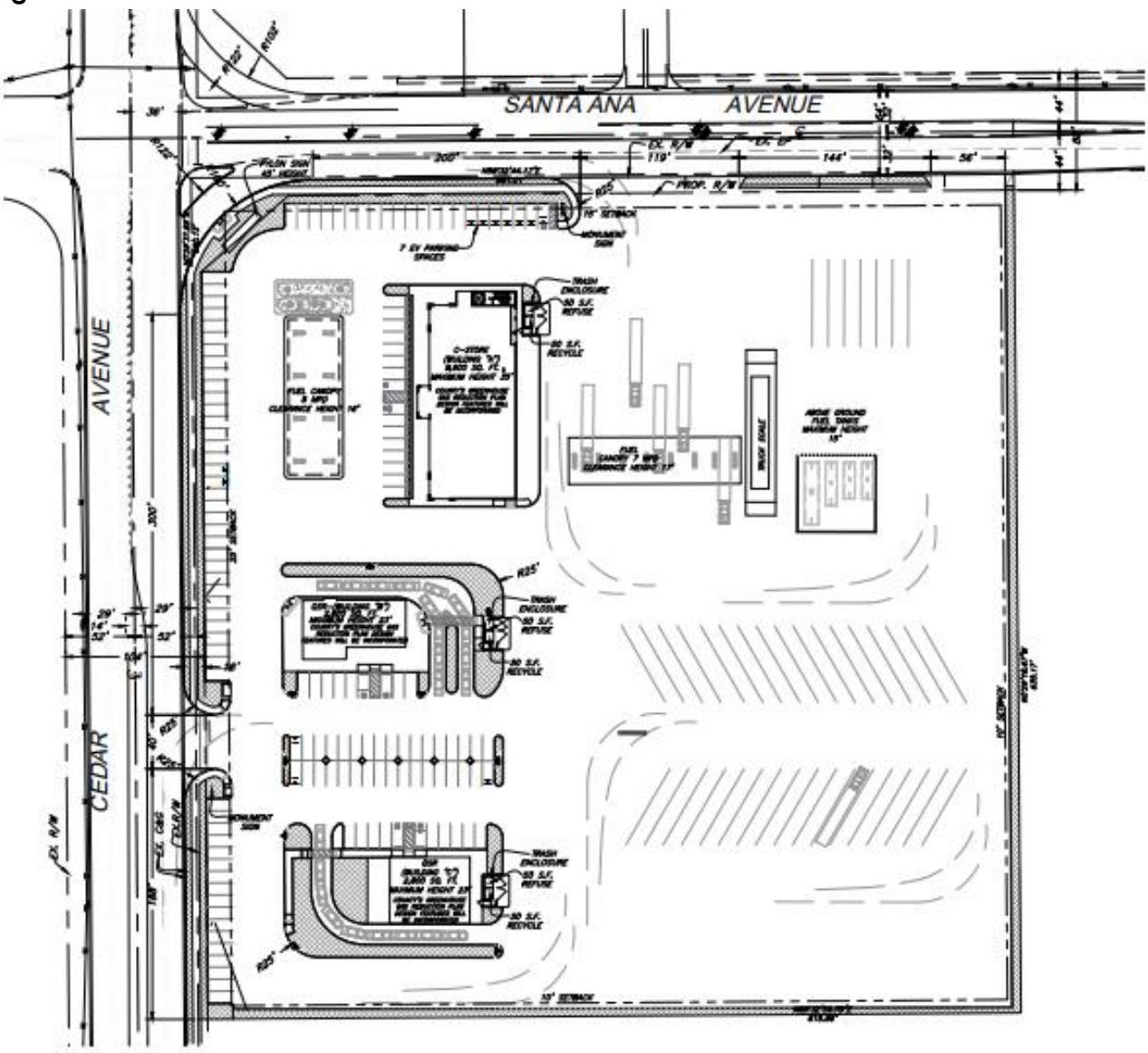
Figure 3 Site Plan



Project Description

The proposed project consist of a gas station with two fuel canopies that includes a 8 Multiple Product Dispensers (MPD) automobile fuel station under one canopy and a 7 MPD truck fuel station under the second canopy with a truck scale, in addition to an approximate 11,400 square foot (SF) convenience store; one (1) 3,000 SF quick service restaurant with a drive thru; and one (1) 2,800 SF quick service restaurant with a drive thru. In addition, a total of 149 parking spaces would be provided onsite that includes 10 ADA parking spaces and 40 truck parking spaces. The proposed site plan is shown in Figure 3.

2 Background

Air pollutants are generally classified as either criteria pollutants or non-criteria pollutants. Federal ambient air quality standards have been established for criteria pollutants, whereas no ambient standards have been established for non-criteria pollutants. For some criteria pollutants, separate standards have been set for different periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). A summary of federal and state ambient air quality standards is provided in the Regulatory Framework section.

2.1 Criteria Pollutants and Ozone Precursors

The criteria pollutants consist of: ozone, NO_x, CO, SO_x, lead (Pb), and particulate matter (PM). The ozone precursors consist of NO_x and VOC. These pollutants can harm your health and the environment, and cause property damage. The Environmental Protection Agency (EPA) calls these pollutants "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria for setting permissible levels. The following provides descriptions of each of the criteria pollutants and ozone precursors.

Nitrogen Oxides

Nitrogen Oxides (NOx) is the generic term for a group of highly reactive gases which contain nitrogen and oxygen. While most NOx are colorless and odorless, concentrations of NO_2 can often be seen as a reddish-brown layer over many urban areas. NOx form when fuel is burned at high temperatures, as in a combustion process. The primary manmade sources of NO_x are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuel. NOx reacts with other pollutants to form, ground-level ozone, nitrate particles, acid aerosols, as well as NO_2, which cause respiratory problems. NO_x and the pollutants formed from NO_x can be transported over long distances, following the patterns of prevailing winds. Therefore, controlling NOx is often most effective if done from a regional perspective, rather than focusing on the nearest sources.

Ozone

Ozone is not usually emitted directly into the air but in the vicinity of ground-level is created by a chemical reaction between NOx and volatile organic compounds (VOC) in the presence of sunlight. Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents as well as natural sources emit NOx and VOC that help form ozone. Ground-level ozone is the primary constituent of smog. Sunlight and hot weather cause ground-level ozone to form with the greatest concentrations usually occurring downwind from urban areas. Ozone is subsequently considered a regional pollutant. Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Because NOx and VOC are ozone precursors, the health effects associated with ozone are also indirect health effects associated with significant levels of NOx and VOC emissions.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes approximately 56 percent of all CO emissions nationwide. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves, gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are indoor sources of CO. The highest levels of CO in the outside air typically occur during the colder months of the year when inversion conditions are more frequent. The air pollution becomes trapped near the ground beneath a layer of warm air. CO is described as having only a local influence because it dissipates quickly. Since CO concentrations are strongly associated with motor vehicle emissions, high CO concentrations generally occur in the immediate vicinity of roadways with high traffic volumes and traffic congestion, active parking lots, and in automobile tunnels. Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations.

CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream. The health threat from lower levels of CO is most serious for those who suffer from heart disease such as angina, clogged arteries, or congestive heart failure. For a person with heart disease, a single exposure to CO at low levels may cause chest pain and reduce that person's ability to exercise; repeated exposures may contribute to other cardiovascular effects. High levels of CO can affect even healthy people. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death.

Sulfur Oxides

Sulfur Oxide (SOx) gases are formed when fuel containing sulfur, such as coal and oil is burned, as well as from the refining of gasoline. SOx dissolves easily in water vapor to form acid and interacts with other gases and particles in the air to form sulfates and other products that can be harmful to people and the environment.

Lead

Lead is a metal found naturally in the environment as well as manufactured products. The major sources of lead emissions have historically been motor vehicles and industrial sources. Due to the phase out of leaded gasoline, metal processing is now the primary source of lead emissions to the air. High levels of lead in the air are typically only found near lead smelters, waste incinerators, utilities, and lead-acid battery manufacturers. Exposure of fetuses, infants and children to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

Particulate Matter

Particle matter (PM) is the term for a mixture of solid particles and liquid droplets found in the air. PM is made up of a number of components including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential

for causing health problems. Particles that are less than 10 micrometers in diameter (PM10) that are also known as *Respirable Particulate Matter* are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. Particles that are less than 2.5 micrometers in diameter (PM2.5) that are also known as *Fine Particulate Matter* have been designated as a subset of PM10 due to their increased negative health impacts and its ability to remain suspended in the air longer and travel further.

Volatile Organic Compounds

Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

VOC is not classified as a criteria pollutant, since VOCs by themselves are not a known source of adverse health effects. The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered toxic air contaminants (TACs). There are no separate health standards for VOCs as a group.

2.2 Other Pollutants of Concern

Toxic Air Contaminants

In addition to the above-listed criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. TACs is a term that is defined under the California Clean Air Act and consists of the same substances that are defined as Hazardous Air Pollutants (HAPs) in the Federal Clean Air Act. There are over 700 hundred different types of TACs with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least 40 different toxic air contaminants. The most important of these TACs, in terms of health risk, are diesel particulates, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Public exposure to TACs can result from emissions from normal operations as well as from accidental releases. Health effects of TACs include cancer, birth defects, neurological damage, and death.

TACs are less pervasive in the urban atmosphere than criteria air pollutants, however they are linked to short-term (acute) or long-term (chronic or carcinogenic) adverse human health effects. There are hundreds of different types of TACs with varying degrees of toxicity. Sources of TACs include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust.

According to *The California Almanac of Emissions and Air Quality 2013 Edition*, the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important of which is DPM. DPM is a subset of PM2.5 because the size of diesel particles are typically 2.5 microns and smaller. The identification of DPM as a TAC in 1998 led the CARB to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles in September 2000. The plan's goals are a 75-percent reduction in DPM by 2010 and an 85-percent

reduction by 2020 from the 2000 baseline. Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The visible emissions in diesel exhaust are known as particulate matter or PM, which includes carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and over 40 other cancer-causing substances. California's identification of DPM as a toxic air contaminant was based on its potential to cause cancer, premature deaths, and other health problems. Exposure to DPM is a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. Overall, diesel engine emissions are responsible for the majority of California's potential airborne cancer risk from combustion sources.

The various pollutants within DPM that also cause acute and chronic health impacts are detailed below in **Error! Reference source not found.**. Table 2 was developed through crosschecking all diesel emissions pollutants provided in San Diego Air Pollutant Control District's (SDAPCD) Diesel Fired Engines Emissions Factor Table to the list of acute and chronic reference exposure levels provided at: http://oehha.ca.gov/air/allrels.html.

According to the California Office of Environmental Health and Hazards Assessment (OEHHA), no acute risk had been found to be directly created from DPM, so there is no acute AREL assigned to DPM. However, as detailed in Table 2, other TAC emissions associated with diesel exhaust do have an acute REL assigned to them. In order to account for the acute risk from all TAC emissions associated with diesel emissions, a hypothetical acute REL was calculated for DPM through multiplying each TAC with an acute REL to its diesel weight fraction and then adding together the results, which resulted in a hypothetical acute AREL of 2,189 for diesel emissions.

Table 2 – Diesel Emission Pollutants that Cause Acute and Chronic Health Impacts

TAC	TAC Potency Factors (µg/m³)[1]		Percent of DPM Emission Rate[3]	Target Organ Systems
	Acute REL[2]	Chronic REL		
1,3-Butadiene	660	140	0.51%	Development
Acetaldehyde	470	140	1.84%	Eyes, respiratory system (sensory irritation)
Acrolein	2.5	0.35	0.08%	Eyes, respiratory system
Arsenic	0.2	0.015	0.004%	Reproductive/developmental, cardiovascular system, nervous system
Benzene	27	3	0.44%	Hematologic system, immune system, reproductive/developmental
Cadmium	--	0.02	0.004%	kidney, respiratory system
Chlorobenzene	--	1,000	0.0005%	Eyes, respiratory system
Chromium (hexavalent)	--	0.2	0.001%	Respiratory system, hematologic system
Copper	100	--	0.01%	Respiratory system
Ethyl benzene	--	5	0.03%	Liver, kidney, developmental
Formaldehyde	55	9	4.07%	Eyes, immune system, respiratory
Hexane	--	200	0.06%	Nervous system
Hydrogen Chloride	2,100	9	0.44%	Eyes, respiratory system
Manganese	--	0.09	0.01%	Nervous system
Mercury	0.6	0.03	0.005%	Reproductive/developmental

TAC	TAC Potency Factors (µg/m³)[1]		Percent of DPM Emission Rate[3]	Target Organ Systems
	Acute REL[2]	Chronic REL		
Naphthalene	--	9	0.05%	Respiratory system
Nickel	0.2	002	0.01%	Immune system, respiratory system
Propylene	--	3000	1.10%	Respiratory System
Selenium	--	20	0.01%	Liver, cardiovascular system, nervous system
Toluene	37000	300	0.25%	Nervous system, eyes, respiratory system, reproductive/developmental
Xylene	22000	700	0.10%	Eyes, nervous and respiratory systems
DPM	--	5	--	Respiratory system

Notes:
[1] Potency factors obtained from: http://www.oehha.ca.gov/risk/ChemicalDB/index.asp
[2] REL = Reference Exposure Level
[3] Percentage of DPM Emission Rate calculated by dividing the pollutant's pounds per 1,000 gallons rate by the PM2.5 pounds per 1,000 gallons rate provided by the SDAPCD
Sources: SDAPCD 2011 and OEHHA 2014.

Asbestos

Asbestos is listed as a TAC by CARB and as a HAP by the EPA. Asbestos occurs naturally in mineral formations and crushing or breaking these rocks, through construction or other means, can release asbestiform fibers into the air. Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining. The risk of disease is dependent upon the intensity and duration of exposure. When inhaled, asbestos fibers may remain in the lungs and with time may be linked to such diseases as asbestosis, lung cancer, and mesothelioma. The nearest likely locations of naturally occurring asbestos, as identified in the General Location Guide for Ultramafic Rocks in California, prepared by the California Division of Mines and Geology, is located in Santa Barbara County. The nearest historic asbestos mine to the project site, as identified in the Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California, prepared by U.S. Geological Survey, is located at Asbestos Mountain, which is approximately 80 miles east of the project site in the San Jacinto Mountains. Due to the distance to the nearest natural occurrences of asbestos, the project site is not likely to contain asbestos.

2.3 Greenhouse Gases

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHGs), play a critical role in the Earth's radiation amount by trapping infrared radiation from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Emissions of CO_2 and N_2O are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with

agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. The following provides a description of each of the greenhouse gases and their global warming potential.

Water Vapor

Water vapor is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to "hold" more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there is also dynamics that put the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the Earth's surface and heat it up).

Carbon Dioxide

The natural production and absorption of CO_2 is achieved through the terrestrial biosphere and the ocean. However, humankind has altered the natural carbon cycle by burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid 1700s, each of these activities has increased in scale and distribution. CO_2 was the first GHG demonstrated to be increasing in atmospheric concentration with the first conclusive measurements being made in the last half of the 20th century. Prior to the industrial revolution, concentrations were fairly stable at 280 parts per million (ppm). The International Panel on Climate Change (IPCC) indicates that concentrations were 379 ppm in 2005, an increase of more than 30 percent. Left unchecked, the IPCC projects that concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources. This could result in an average global temperature rise of at least two degrees Celsius or 3.6 degrees Fahrenheit.

Methane

CH_4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of CO_2. Its lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as CO_2, N_2O, and Chlorofluorocarbons (CFCs)). CH_4 has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide

Concentrations of N_2O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration of this GHG was documented at 314 parts per billion (ppb). N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. N_2O is also commonly used as an aerosol spray propellant (i.e., in whipped cream bottles, in potato chip bags to keep chips fresh, and in rocket engines and race cars).

Chlorofluorocarbons

CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons

HFCs are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). Concentrations of CF_4 in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

Sulfur Hexafluoride

Sulfur Hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 has the highest global warming potential of any gas evaluated; 23,900 times that of CO_2. Concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Aerosols

Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Cloud formation can also be affected by aerosols. Sulfate aerosols are emitted when fuel containing sulfur is burned. Black carbon (or soot) is emitted during biomass burning due to the incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing.

Global Warming Potential

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to the reference gas, CO_2. The GHGs listed by the IPCC and the CEQA Guidelines are discussed in this section in order of abundance in the atmosphere. Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic (human-made) sources. To simplify reporting and analysis, GHGs are commonly defined in terms of their GWP. The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of CO_2e. As such, the GWP of CO_2 is equal to 1. The GWP values used in this analysis are based on the 2007 IPCC Fourth Assessment Report, which are used in CARB's 2014 Scoping Plan Update and the CalEEMod Model Version 2016.3.2 and are detailed in Table 3. The IPCC has updated the Global Warming Potentials of some gases in their Fifth Assessment Report, however the new values have not yet been incorporated into the CalEEMod model that has been utilized in this analysis.

Table 3 – Global Warming Potentials, Atmospheric Lifetimes and Abundances of GHGs

Gas	Atmospheric Lifetime (years)[1]	Global Warming Potential (100 Year Horizon)[2]	Atmospheric Abundance
Carbon Dioxide (CO_2)	50-200	1	379 ppm
Methane (CH_4)	9-15	25	1,774 ppb
Nitrous Oxide (N_2O)	114	298	319 ppb
HFC-23	270	14,800	18 ppt
HFC-134a	14	1,430	35 ppt
HFC-152a	1.4	124	3.9 ppt
PFC: Tetrafluoromethane (CF_4)	50,000	7,390	74 ppt
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200	2.9 ppt
Sulfur Hexafluoride (SF_6)	3,200	22,800	5.6 ppt

Notes:
[1] Defined as the half-life of the gas.
[2] Compared to the same quantity of CO_2 emissions and is based on the Intergovernmental Panel On Climate Change (IPCC) 2007 standard, which is utilized in CalEEMod (Version 2016.3.2),that is used in this report.
Definitions: ppm = parts per million; ppb = parts per billion; ppt = parts per trillion
Source: IPCC 2007, EPA 2015

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 (EPA 2018). Total U.S. emissions have increased by 2.4 percent since 1990; emissions decreased by 1.9 percent from 2015 to 2016 (EPA 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 (EPA 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 (EPA 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.

3 Air Quality Management

The air quality at the project site is addressed through the efforts of various international, federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality are discussed below.

3.1 Federal – United States Environmental Protection Agency

The Clean Air Act, first passed in 1963 with major amendments in 1970, 1977 and 1990, is the overarching legislation covering regulation of air pollution in the United States. The Clean Air Act has established the mandate for requiring regulation of both mobile and stationary sources of air pollution at the state and federal level. The Environmental Protection Agency (EPA) was created in 1970 in order to consolidate research, monitoring, standard-setting and enforcement authority into a single agency.

The EPA is responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. NAAQS pollutants were identified using medical evidence and are shown below in Table 4.

As part of its enforcement responsibilities, the EPA requires each state with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the national standards. The SIP must integrate federal, state, and local components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP. The CARB defines attainment as the category given to an area with no violations in the past three years. As indicated below in Table 5, the Air Basin has been designated by EPA for the national standards as a non-attainment area for ozone and PM2.5 and partial non-attainment for lead. Currently, the Air Basin is in attainment with the national ambient air quality standards for CO, PM10, SO_2, and NO_2.

Table 4 – State and Federal Criteria Pollutant Standards

Air Pollutant	Concentration / Averaging Time		Most Relevant Effects
	California Standards	Federal Primary Standards	
Ozone (O_3)	0.09 ppm / 1-hour 0.07 ppm / 8-hour	0.070 ppm, / 8-hour	(a) Pulmonary function decrements and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; and (f) Property damage.
Carbon Monoxide (CO)	20.0 ppm / 1-hour 9.0 ppm / 8-hour	35.0 ppm / 1-hour 9.0 ppm / 8-hour	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of

Air Pollutant	Concentration / Averaging Time		Most Relevant Effects
	California Standards	Federal Primary Standards	
			central nervous system functions; and (d) Possible increased risk to fetuses.
Nitrogen Dioxide (NO_2)	0.18 ppm / 1-hour 0.030 ppm / annual	100 ppb / 1-hour 0.053 ppm / annual	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (c) Contribution to atmospheric discoloration.
Sulfur Dioxide (SO_2)	0.25 ppm / 1-hour 0.04 ppm / 24-hour	75 ppb / 1-hour 0.14 ppm/annual	(a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma.
Suspended Particulate Matter (PM_{10})	50 µg/m^3 / 24-hour 20 µg/m^3 / annual	150 µg/m^3 / 24-hour	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature death from heart or lung diseases in elderly.
Suspended Particulate Matter ($PM_{2.5}$)	12 µg/m^3 / annual	35 µg/m^3 / 24-hour 12 µg/m^3 / annual	
Sulfates	25 µg/m^3 / 24-hour	No Federal Standards	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; and (f) Property damage.
Lead	1.5 µg/m^3 / 30-day	0.15 µg/m^3 /3-month rolling	(a) Learning disabilities; and (b) Impairment of blood formation and nerve conduction.
Visibility Reducing Particles	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent.	No Federal Standards	Visibility impairment on days when relative humidity is less than 70 percent.

Source: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf .

Table 5 – South Coast Air Basin Attainment Status

Criteria Pollutant	Standard	Averaging Time	Designation[a)]	Attainment Date[b)]
1-Hour Ozone[c)]	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 (revised deadline)
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone[d)]	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	8/3/2038
	NAAQS	2015 8-Hour (0.070 ppm)	Pending – Expect Nonattainment (Extreme)	Pending (beyond 2032)
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032

Criteria Pollutant	Standard	Averaging Time	Designation[a)]	Attainment Date[b)]
CO	NAAQS	1-Hour (35 ppm) 8-Hour (9 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	CAAQS	1-Hour (20 ppm) 8-Hour (9 ppm)	Attainment	6/11/2007 (attained)
NO_2[e)]	NAAQS	2010 1-Hour (0.10 ppm)	Unclassifiable/ Attainment	N/A (attained)
	NAAQS	1971 Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-Hour (0.18 ppm) Annual (0.030 ppm)	Attainment	---
SO_2[f)]	NAAQS	2010 1-Hour (75 ppb)	Designations Pending (expect Unclassifiable/ Attainment)	N/A (attained)
	NAAQS	1971 24-Hour (0.14 ppm) 1971 Annual (0.03 ppm)	Unclassifiable/ Attainment	3/19/1979 (attained)
PM10	NAAQS	1987 24-hour (150 µg/m^3)	Attainment (Maintenance)[g)]	7/26/2013 (attained)
	CAAQS	24-hour (50 µg/m^3) Annual (20 µg/m^3)	Nonattainment	N/A
PM2.5[h)]	NAAQS	2006 24-Hour (35 µg/m^3)	Nonattainment (Serious)	12/31/2019
	NAAQS	1997 Annual (15.0 µg/m^3)	Attainment (final determination pending)	8/24/2016 (attained 2013)
	NAAQS	2012 Annual (12.0 µg/m^3)	Nonattainment (Moderate)	12/31/2021
	CAAQS	Annual (12.0 µg/m^3)	Nonattainment	N/A
Lead[i)]	NAAQS	2008 3-Months Rolling (0.15 µg/m^3)	Nonattainment (Partial) (Attainment determination requested)	12/31/2015

Source: SCAQMD, February 2016
Notes:
a) EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable
b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration
c) The 1979 1-hour O_3 standard (0.12 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard and therefore has some continuing obligations with respect to the revoked standard
d) The 2008 8-hour ozone NAAQS (0.075 ppm) was revised to 0.070 ppm. Effective 12/28/15 with classifications and implementation goals to be finalized by 10/1/17; the 1997 8-hour O_3 NAAQS (0.08 ppm) was revoked in the 2008 O_3 implementation rule, effective 4/6/15;there are continuing obligations under the revoked 1997 and revised 2008 O_3 until they are attained.
e) New NO_2 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO_2 standard retained
f) The 1971 annual and 24-hour SO_2 standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after EPA promulgates area designations for the 2010 SO_2 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.
g) Annual PM10 standard was revoked, effective December 18, 2006; 24-hour PM10 NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM10 maintenance plan was approved by EPA on June 26, 2013, effective July 26, 2013.
h) The attainment deadline for the 2006 24-Hour PM2.5 NAAQS was 12/31/15 for the former "moderate" classification; EPA approved reclassification to "serious", effective 2/12/16 with an attainment deadline of 12/31/19; the 2012 (proposal year) annual PM2.5 NAAQS was revised on 1/15/13, effective 3/18/13, from 15 to 12 µg/m^3; new annual designations were final 1/15/15, effective 4/15/15; on July 25, 2016 EPA finalized a determination that the Basin attained the 1997 annual (15.0 µg/m^3) and 24-hour PM2.5 (65 µg/m^3) NAAQS, effective August 24, 2016
i) Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect to remain in attainment based on current monitoring data; attainment re-designation request pending.

In 2015, one or more stations in the Air Basin exceeded the most current federal standards on a total of 146 days (40 percent of the year), including: 8-hour ozone (113 days over 2015 ozone NAAQS), 24-hour $PM_{2.5}$ (30 days, including near-road sites; 25 days for ambient sites only), PM_{10} (2 days), and NO_2 (1 day). Despite substantial improvement in air quality over the past few decades, some air monitoring stations in the Air Basin still exceed the NAAQS for ozone more frequently than

any other area in the United States. Seven of the top 10 stations in the nation most frequently exceeding the 2015 8-hour ozone NAAQS in 2015 were located within the Air Basin, including stations in San Bernardino, Riverside, and Los Angeles Counties (SCAQMD, 2016).

$PM_{2.5}$ levels in the Air Basin have improved significantly in recent years. By 2013 and again in 2014 and 2015, there were no stations measuring $PM_{2.5}$ in the Air Basin that violated the former 1997 annual $PM_{2.5}$ NAAQS (15.0 µg/m^3) for the 3-year design value period. On July 25, 2016 the EPA finalized a determination that the Basin attained the 1997 annual (15.0 µg/m^3) and 24-hour $PM_{2.5}$ (65 µg/m^3) NAAQS, effective August 24, 2016. Of the 17 federal $PM_{2.5}$ monitors at ambient stations in the Air Basin for the 2013-2015 period, five stations had design values over the current 2012 annual $PM_{2.5}$ NAAQS (12.0 µg/m^3), including: Mira Loma (Air Basin maximum at 14.1 µg/m^3), Rubidoux, Fontana, Ontario, Central Los Angeles, and Compton. For the 24-hour $PM_{2.5}$ NAAQS (35.0 µg/m^3) there were 14 stations in the Air Basin in 2015 that had one or more daily exceedances of the standard, with a combined total of 25 days over that standard in the Air Basin. While it was previously anticipated that the Air Basin's 24-hour $PM_{2.5}$ NAAQS would be attained by 2015, this did not occur based on the data for 2013 through 2015. The higher number of days exceeding the 24-hour $PM_{2.5}$ NAAQS over what was expected is largely attributed to the severe drought conditions over this period that allowed for more stagnant conditions in the Air Basin with multi-day buildups of higher $PM_{2.5}$ concentrations. This was caused by the lack of storm-related dispersion and rain-out of PM and its precursors (SCAQMD, 2016).

The Air Basin is currently in attainment for the federal standards for SO_2, CO, NO_2, and PM_{10} and the San Bernardino County portion of the Air Basin is currently in attainment for the federal standards for lead. While the concentration level of the 1-hour NO_2 federal standard (100 ppb) was exceeded in the Air Basin for one day in 2015 (Long Beach- Hudson Station), the NAAQS NO_2 design value has not been exceeded. Therefore, the Air Basin remains in attainment of the NO_2 NAAQS (SCAQMD, 2016).

3.2 State – California Air Resources Board

The California Air Resources Board (CARB), which is a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. The CAAQS for criteria pollutants are shown above in Table 5. In addition, the CARB establishes emission standards for motor vehicles sold in California, consumer products (e.g. hairspray, aerosol paints, and barbeque lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

The Air Basin has been designated by the CARB as a non-attainment area for ozone, PM10 and PM2.5. Currently, the Air Basin is in attainment with the ambient air quality standards for CO, NO_2, SO_2, lead, and sulfates and is unclassified for visibility reducing particles and Hydrogen Sulfide.

The following lists the State of California Code of Regulations (CCR) air quality emission rules that are applicable, but not limited to all warehouse projects in the State.

Assembly Bill 2588

The Air Toxics "Hot Spots" Information and Assessment Act (Assembly Bill [AB] 2588, 1987, Connelly) was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. AB 2588, as amended, establishes a process that requires stationary sources to report the type and quantities of certain substances their facilities routinely release in California. The data is ranked by high, intermediate, and low categories, which are determined by: the potency, toxicity, quantity, volume, and proximity of the facility to nearby receptors.

CARB Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the California Air Resources Board (CARB) adopted California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 to reduce diesel particulate matter (DPM) and NOx emissions from in-use off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than five consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. Performance requirements of the rule are based on a fleet's average NOx emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirement making the first compliance deadline January 1, 2014 for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less). Currently, no commercial operation in California may add any equipment to their fleet that has a Tier 0 or Tier 1 engine. By January 1, 2018 medium and large fleets will be restricted from adding Tier 2 engines to their fleets and by January 2023, no commercial operation will be allowed to add Tier 2 engines to their fleets. It should be noted that commercial fleets may continue to use their existing Tier 0 and 1 equipment, if they can demonstrate that the average emissions from their entire fleet emissions meet the NOx emissions targets.

CARB Resolution 08-43 for On-Road Diesel Truck Fleets

On December 12, 2008 the CARB adopted Resolution 08-43, which limits NOx, PM10 and PM2.5 emissions from on-road diesel truck fleets that operate in California. On October 12, 2009 Executive Order R-09-010 was adopted that codified Resolution 08-43 into Section 2025, title 13 of the California Code of Regulations. This regulation requires that by the year 2023 all commercial diesel trucks that operate in California shall meet model year 2010 (Tier 4 Final) or latter emission standards. In the interim period, this regulation provides annual interim targets for fleet owners to meet. By January 1, 2014, 50 percent of a truck fleet is required to have installed Best Available Control Technology (BACT) for NOx emissions and 100 percent of a truck fleet installed BACT for PM10 emissions. This regulation also provides a few exemptions including a onetime per year 3-day pass for trucks registered outside of California. All on-road diesel trucks utilized during construction of the proposed project will be required to comply with Resolution 08-43.

3.3 Regional – Southern California

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin. To that end, as a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all federal and state agencies.

South Coast Air Quality Management District

SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. It has responded to this requirement by preparing a sequence of AQMPs. The *Final 2016 Air Quality Management Plan* (2016 AQMP) was adopted by the SCAQMD Board on March 3, 2016 and was adopted by CARB on March 23, 2017 for inclusion into the California State Implementation Plan (SIP). The 2016 AQMP was prepared in order to meet the following standards:

- 8-hour Ozone (75 ppb) by 2032
- Annual PM2.5 (12 µg/m3) by 2021-2025
- 8-hour Ozone (80 ppb) by 2024 (updated from the 2007 and 2012 AQMPs)
- 1-hour Ozone (120 ppb) by 2023 (updated from the 2012 AQMP)
- 24-hour PM2.5 (35 µg/m^3) by 2019 (updated from the 2012 AQMP)

In addition to meeting the above standards, the 2016 AQMP also includes revisions to the attainment demonstrations for the 1997 8-hour ozone NAAQS and the 1979 1-hour ozone NAAQS. The prior 2012 AQMP was prepared in order to demonstrate attainment with the 24-hour PM2.5 standard by 2014 through adoption of all feasible measures. The prior 2007 AQMP demonstrated attainment with the 1997 8-hour ozone (80 ppb) standard by 2023, through implementation of future improvements in control techniques and technologies. These "black box" emissions reductions represent 65 percent of the remaining NOx emission reductions by 2023 in order to show attainment with the 1997 8-hour ozone NAAQS. Given the magnitude of these needed emissions reductions, additional NOx control measures have been provided in the 2012 AQMP even though the primary purpose was to show compliance with 24-hour PM2.5 emissions standards.

The 2016 AQMP provides a new approach that focuses on available, proven and cost effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities to promote reductions in GHG emissions and TAC emissions as well as efficiencies in energy use, transportation, and goods movement. The 2016 AQMP recognizes the critical importance of working with other agencies to develop funding and other incentives that encourage the accelerated transition of vehicles, buildings and industrial facilities to cleaner technologies in a manner that benefits not only air quality, but also local businesses and the regional economy.

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate air quality issues associated with plans and new development projects throughout the Air Basin. Instead, this is controlled through local jurisdictions in accordance to the California Environmental Quality Act (CEQA). In order to assist local jurisdictions with air quality compliance issues the *CEQA Air Quality Handbook* (SCAQMD CEQA Handbook), prepared by SCAQMD, 1993, with the most current updates found at http://www.aqmd.gov/ceqa/hdbk.html, was developed in accordance with the projections and programs detailed in the AQMPs. The purpose of the SCAQMD CEQA Handbook is to assist Lead Agencies, as well as consultants, project proponents, and other interested parties in evaluating a proposed project's potential air quality impacts. Specifically, the SCAQMD CEQA Handbook explains the procedures that SCAQMD recommends be followed for the environmental review process required by CEQA. The SCAQMD CEQA Handbook provides direction on how to evaluate potential air quality impacts, how to

determine whether these impacts are significant, and how to mitigate these impacts. The SCAQMD intends that by providing this guidance, the air quality impacts of plans and development proposals will be analyzed accurately and consistently throughout the Air Basin, and adverse impacts will be minimized.

The following lists the SCAQMD rules that are applicable but not limited to gas station development projects in the Air Basin.

Rule 201 – Permit to Construct

Rule 201 requires that a permit to construct be obtained prior to start of construction activities for all facilities that need to obtain an Air Quality Permit from the SCAQMD to operate, which includes gas stations.

Rule 203 – Permit to Operate

Rule 201 requires that a permit to operate be obtained prior to start of operational activities for all facilities that need to obtain an Air Quality Permit from the SCAQMD to operate, which includes gas stations.

Rule 402 - Nuisance

Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Compliance with Rule 402 will reduce local air quality and odor impacts to nearby sensitive receptors.

Rule 403- Fugitive Dust

Rule 403 governs emissions of fugitive dust during construction activities and requires that no person shall cause or allow the emissions of fugitive dust such that dust remains visible in the atmosphere beyond the property line or the dust emission exceeds 20 percent opacity, if the dust is from the operation of a motorized vehicle. Compliance with this rule is achieved through application of standard Best Available Control Measures, which include but are not limited to the measures below. Compliance with these rules would reduce local air quality impacts to nearby sensitive receptors.

- Utilize either a pad of washed gravel 50 feet long, 100 feet of paved surface, a wheel shaker, or a wheel washing device to remove material from vehicle tires and undercarriages before leaving project site.
- Do not allow any track out of material to extend more than 25 feet onto a public roadway and remove all track out at the end of each workday.
- Water all exposed areas on active sites at least three times per day and pre-water all areas prior to clearing and soil moving activities.
- Apply nontoxic chemical stabilizers according to manufacturer specifications to all construction areas that will remain inactive for 10 days or longer.

- Pre-water all material to be exported prior to loading, and either cover all loads or maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code Section 23114.
- Replant all disturbed area as soon as practical.
- Suspend all grading activities when wind speeds (including wind gusts) exceed 25 miles per hour.
- Restrict traffic speeds on all unpaved roads to 15 miles per hour or less.

Rules 461 – Gasoline Dispensing Facilities

Rule 461 governs the operation of gasoline stations and requires that all underground storage tanks are equipped with a "CARB certified" enhanced vapor recovery system, all fill tubes are equipped with vapor tight caps, all dry breaks are equipped with vapor tight seals, a spill box shall be installed to capture any gasoline spillage, and all equipment is required to be properly maintained per CARB regulations. All gasoline dispensing units are required to be equipped with a "CARB certified" vapor recovery system, the dispensing system components all maintain vapor and liquid tight connections at all times and the breakaway coupling shall be equipped with a poppet valve that shall close when coupling is separated. Rule 461 also provides several additional requirements including detailed maintenance, testing, reporting, and recordkeeping requirements for all gas stations.

Rules 1108 and 1108.1 – Cutback and Emulsified Asphalt

Rules 1108 and 1108.1 govern the sale, use, and manufacturing of asphalt and limits the VOC content in asphalt. This rule regulates the VOC contents of asphalt used during construction as well as any on-going maintenance during operations. Therefore, all asphalt used during construction and operation of the proposed project must comply with SCAQMD Rules 1108 and 1108.1.

Rule 1113 – Architectural Coatings

Rule 1113 governs the sale, use, and manufacturing of architectural coatings and limits the VOC content in sealers, coatings, paints and solvents. This rule regulates the VOC contents of paints available during construction. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

Rule 1143 – Paint Thinners

Rule 1143 governs the sale, use, and manufacturing of paint thinners and multi-purpose solvents that are used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations. This rule regulates the VOC content of solvents used during construction. Solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1143.

Rule 1401 – New Source Review of Toxic Air Contaminants

Rule 1401 specifies cancer risk limits and noncancer acute and chronic limits that may be created from new permitted sources of toxic air contaminant emissions, which includes gasoline dispensing facilities. This rule requires the quantification of the cancer risk created by the proposed gasoline dispensing facility.

Southern California Association of Governments

The SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With respect to air quality planning, SCAG has prepared the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS), adopted April, 2016 and the *2019 Federal Transportation Improvement* Program (FTIP), adopted September 2018, which addresses regional development and growth forecasts. Although the RTP/SCS and FTIP are primarily planning documents for future transportation projects a key component of these plans are to integrate land use planning with transportation planning that promotes higher density infill development in close proximity to existing transit service. These plans form the basis for the land use and transportation components of the AQMP, which are utilized in the preparation of air quality forecasts and in the consistency analysis included in the AQMP. The RTP/SCS, FTIP, and AQMP are based on projections originating within the City and County General Plans.

3.4 Local – County of San Bernardino

Local jurisdictions, such as the County of San Bernardino, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the County is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The County is also responsible for the implementation of transportation control measures as outlined in the AQMPs. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the County assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

In accordance with the CEQA requirements, the County does not, however, have the expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the County and region will meet federal and state standards. Instead, the County relies on the expertise of the SCAQMD and utilizes the SCAQMD CEQA Handbook as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

4 Global Climate Change Management

The regulatory setting related to global climate change is addressed through the efforts of various international, federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to reduce GHG emissions through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for global climate change regulations are discussed below.

4.1 International

In 1988, the United Nations established the Intergovernmental Panel on Climate Change (IPCC) to evaluate the impacts of global climate change and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the United Nations' Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling GHG emissions. The parties of the UNFCCC adopted the Kyoto Protocol, which set binding GHG reduction targets for 37 industrialized countries, the objective of reducing their collective GHG emissions by five percent below 1990 levels by 2012. The Kyoto Protocol has been ratified by 182 countries, but has not been ratified by the United States. It should be noted that Japan and Canada opted out of the Kyoto Protocol and the remaining developed countries that ratified the Kyoto Protocol have not met their Kyoto targets. The Kyoto Protocol expired in 2012 and the amendment for the second commitment period from 2013 to 2020 has not yet entered into legal force. The Parties to the Kyoto Protocol negotiated the Paris Agreement in December 2015, agreeing to set a goal of limiting global warming to less than 2 degrees Celsius compared with pre-industrial levels. The Paris Agreement has been adopted by 195 nations with 147 ratifying it, including the United States by President Obama, who ratified it by Executive Order on September 3, 2016. On June 1, 2017, President Trump announced that the United States is withdrawing from the Paris Agreement, however the Paris Agreement is still legally binding by the other remaining nations.

Additionally, the Montreal Protocol was originally signed in 1987 and substantially amended in 1990 and 1992. The Montreal Protocol stipulates that the production and consumption of compounds that deplete ozone in the stratosphere—CFCs, halons, carbon tetrachloride, and methyl chloroform—were to be phased out, with the first three by the year 2000 and methyl chloroform by 2005.

4.2 Federal – United States Environmental Protection Agency

The United States Environmental Protection Agency (EPA) is responsible for implementing federal policy to address global climate change. The Federal government administers a wide array of public-private partnerships to reduce U.S. GHG intensity. These programs focus on energy efficiency, renewable energy, methane, and other non-CO_2 gases, agricultural practices and implementation of technologies to achieve GHG reductions. EPA implements several voluntary programs that substantially contribute to the reduction of GHG emissions.

In Massachusetts v. Environmental Protection Agency (Docket No. 05–1120), argued November 29, 2006 and decided April 2, 2007, the U.S. Supreme Court held that not only did the EPA have authority to regulate greenhouse gases, but the EPA's reasons for not regulating this area did not fit the statutory requirements. As such, the U.S. Supreme Court ruled that the EPA should be required to regulate CO2 and other greenhouse gases as pollutants under the federal Clean Air Act (CAA).

In response to the FY2008 Consolidations Appropriations Act (H.R. 2764; Public Law 110-161), EPA proposed a rule on March 10, 2009 that requires mandatory reporting of GHG emissions from large sources in the United States. On September 22, 2009, the Final Mandatory Reporting of GHG Rule was signed and published in the Federal Register on October 30, 2009. The rule became effective on December 29, 2009. This rule requires suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions to submit annual reports to EPA.

On December 7, 2009, the EPA Administrator signed two distinct findings under section 202(a) of the Clean Air Act. One is an endangerment finding that finds concentrations of the six GHGs in the atmosphere threaten the public health and welfare of current and future generations. The other is a cause or contribute finding, that finds emissions from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare. These actions did not impose any requirements on industry or other entities, however, since 2009 the EPA has been providing GHG emission standards for vehicles and other stationary sources of GHG emissions that are regulated by the EPA. On September 13, 2013 the EPA Administrator signed 40 CFR Part 60, that limits emissions from new sources to 1,100 pounds of CO_2 per MWh for fossil fuel-fired utility boilers and 1,000 pounds of CO_2 per MWh for large natural gas-fired combustion units.

On August 3, 2015, the EPA announced the Clean Power Plan, emissions guidelines for U.S. states to follow in developing plans to reduce GHG emissions from existing fossil fuel-fired power plants (Federal Register Vol. 80, No. 205, October 23 2015). On February 9, 2016 the Supreme Court stayed implementation of the Clean Power Plan due to a legal challenge from 29 states and in April 2017, the Supreme Court put the case on a 60 day hold and directed both sides to make arguments for whether it should keep the case on hold indefinitely or close it and remand the issue to the EPA. On October 11, 2017, the EPA issued a formal proposal to repeal the Clean Power Plan and on June 19, 2019, the EPA issued the Affordable Clean Energy Rule that replaces the Clean Power Plan.

On September 27, 2019, the EPA and the National Highway Safety Administration published the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks* (SAFE Vehicles Rule). Part One of the Rule revokes California's authority to set its own GHG emissions standards and zero-emission vehicle mandates in California, which results in one emission standard to be used nationally for all passenger cars and light trucks that is set by the EPA.

4.3 State

The California Air Resources Board (CARB) has the primary responsible for implementing state policy to address global climate change, however there are State regulations related to global climate change that affect a variety of State agencies. CARB, which is a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both the federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. In addition, the CARB establishes emission standards for motor vehicles sold in California, consumer products

(e.g. hairspray, aerosol paints, and barbeque lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In 2008, CARB approved a Climate Change Scoping Plan that proposes a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (CARB 2008). The Climate Change Scoping Plan has a range of GHG reduction actions which include direct regulations; alternative compliance mechanisms; monetary and non-monetary incentives; voluntary actions; market-based mechanisms such as a cap-and-trade system. In 2014, CARB approved the First Update to the Climate Change Scoping Plan (CARB, 2014) that identifies additional strategies moving beyond the 2020 targets to the year 2050. On December 14, 2017 CARB adopted the California's 2017 Climate Change Scoping Plan, November 2017 (CARB, 2017) that provides specific statewide policies and measures to achieve the 2030 GHG reduction target of 40 percent below 1990 levels by 2030 and the aspirational 2050 GHG reduction target of 80 percent below 1990 levels by 2050. In addition, the State has passed the following laws directing CARB to develop actions to reduce GHG emissions, which are listed below in chronological order, with the most current first.

California Code of Regulations (CCR) Title 24, Part 6

CCR Title 24, Part 6: *California's Energy Efficiency Standards for Residential and Nonresidential Buildings* (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The California Energy Commission (CEC) is the agency responsible for the standards that are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. In 2008 the State set an energy-use reduction goal of zero-net-energy use of all new homes by 2020 and the CEC was mandated to meet this goal through revisions to the Title 24, Part 6 regulations.

The Title 24 standards are updated on a three-year schedule and since 2008 the standards have been incrementally moving to the 2020 goal of the zero-net-energy use. Currently the 2019 Title 24 standards are in effect and have been designed so that the average new home built in California will now use zero-net-energy. Single-family homes built with 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards. The 2019 standards also now require that all single-family homes to have rooftop solar photovoltaic systems and when the solar systems are factored in, homes built under the 2019 standards will use about 53 percent less energy than homes built under the prior 2016 standards. In addition to requiring rooftop solar systems, the 2019 standards also encourage the use of battery storage and heat pump water heaters, require the more widespread use of LED lighting, as well as improve the building's thermal envelope through high performance attics, walls and windows. The 2019 standards also require improvements to ventilation systems by requiring highly efficient air filters to trap hazardous air particulates as well as improvements to kitchen ventilation systems. (https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf)

California Code of Regulations (CCR) Title 24, Part 11

CCR Title 24, Part 11: *California Green Building Standards* (CALGreen) was developed in response to continued efforts to reduce GHG emissions associated with energy consumption. The CALGreen Building Standards are also updated every three years and the current version is the 2019 California Green Building Standard Code that become effective on January 1, 2020.

The CALGreen Code contains requirements for construction site selection; storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, storm water management, building design, insulation, flooring, and framing, among others. Implementation of the CALGreen Code measures reduces energy consumption and vehicle trips and encourages the use of alternative-fuel vehicles, which reduces pollutant emissions.

Some of the notable changes in the 2019 CALGreen Code over the prior 2016 CALGreen Code include: an alignment of building code engineering requirements with the national standards that include anchorage requirements for solar panels, provides design requirements for buildings in tsunami zones, increases Minimum Efficiency Reporting Value (MERV) for air filters from 8 to 13, increased electric vehicle charging requirements in parking areas, and sets minimum requirements for use of shade trees.

Senate Bill 100

Senate Bill 100 (SB 100) was adopted September 2018 and requires that by December 1, 2045 that 100 percent of retail sales of electricity to be generated from renewable or zero-carbon emission sources of electricity. SB 100 supersedes the renewable energy requirements set by SB 350, SB 1078, SB 107, and SB X1-2. However, the interim renewable energy thresholds from the prior Bills of 44 percent by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, will remain in effect.

Executive Order B-48-18 and Assembly Bill 2127

The California Governor issued Executive Order B-48-18 on January 26, 2018 that orders all state entities to work with the private sector to put at least five million zero-emission vehicles on California roads by 2030 and to install 200 hydrogen fueling stations and 250,000 electric vehicle chargers by 2025. Currently there are approximately 350,000 electric vehicles operating in California, which represents approximately 1.5 percent of the 24 million vehicles total currently operating in California. Implementation of Executive Order B-48-18 would result in approximately 20 percent of all vehicles in California to be zero emission electric vehicles. Assembly Bill 2127 (AB 2127) was codified into statute on September 13, 2018 and requires that the California Energy Commission working with the State Air Resources Board prepare biannual assessments of the statewide electric vehicle charging infrastructure needed to support the levels of zero emission vehicle adoption required for the State to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030.

Executive Order B-30-15, Senate Bill 32 and Assembly Bill 197

The California Governor issued Executive Order B-30-15 on April 29, 2015 that aims to reduce California's GHG emissions 40 percent below 1990 levels by 2030. This executive order aligns

California's GHG reduction targets with those of other international governments, such as the European Union that set the same target for 2030 in October, 2014. This target will make it possible to reach the ultimate goal of reducing GHG emissions 80 percent under 1990 levels by 2050 that is based on scientifically established levels needed in the U.S.A to limit global warming below 2 degrees Celsius – the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels. Assembly Bill 197 (AB 197) (September 8, 2016) and Senate Bill 32 (SB 32) (September 8, 2016) codified into statute the GHG emissions reduction targets of at least 40 percent below 1990 levels by 2030 as detailed in Executive Order B-30-15. AB 197 also requires additional GHG emissions reporting that is broken down to sub-county levels and requires CARB to consider the social costs of emissions impacting disadvantaged communities.

Executive Order B-29-15

The California Governor issued Executive Order B-29-15 on April 1, 2015 and directed the State Water Resources Control Board to impose restrictions to achieve a statewide 25% reduction in urban water usage and directed the Department of Water Resources to replace 50 million square feet of lawn with drought tolerant landscaping through an update to the State's Model Water Efficient Landscape Ordinance. The Ordinance also requires installation of more efficient irrigation systems, promotion of greywater usage and onsite stormwater capture, and limits the turf planted in new residential landscapes to 25 percent of the total area and restricts turf from being planted in median strips or in parkways unless the parkway is next to a parking strip and a flat surface is required to enter and exit vehicles. Executive Order B-29-15 would reduce GHG emissions associated with the energy used to transport and filter water.

Assembly Bill 341 and Senate Bills 939 and 1374

Senate Bill 939 (SB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board to adopt a model ordinance by March 1, 2004 suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills. Assembly Bill 341 (AB 341) was adopted in 2011 and builds upon the waste reduction measures of SB 939 and 1374, and sets a new target of a 75 percent reduction in solid waste generated by the year 2020.

Senate Bill 375

Senate Bill 375 (SB 375) was adopted September 2008 in order to support the State's climate action goals to reduce GHG emissions through coordinated regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires CARB to set regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established targets for 2020 and 2035 for each Metropolitan Planning Organizations (MPO) within the State. It was up to each MPO to adopt a sustainable communities strategy (SCS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP) to meet CARB's 2020 and 2035 GHG emission reduction targets. These reduction targets are required to be updated every eight years and the most current targets are detailed at: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets, which provides GHG emissions reduction targets for SCAG of 8 percent by 2020 and 19 percent by 2035.

The *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS), adopted by SCAG April, 2016 provides a 2020 GHG emission reduction target of 8 percent and a 2035 GHG emission reduction target of 18 percent. SCAG will need to develop additional strategies in its next revision of the RTP/SCS in order to meet CARB's new 19 percent GHG emission reduction target for 2035. CARB is also charged with reviewing SCAG's RTP/SCS for consistency with its assigned targets.

City and County land use policies, including General Plans, are not required to be consistent with the RTP and associated SCS. However, new provisions of CEQA incentivize, through streamlining and other provisions, qualified projects that are consistent with an approved SCS and categorized as "transit priority projects."

Assembly Bill 1109

California Assembly Bill 1109 (AB 1109) was adopted October 2007, also known as the Lighting Efficiency and Toxics Reduction Act, prohibits the manufacturing of lights after January 1, 2010 that contain levels of hazardous substances prohibited by the European Union pursuant to the RoHS Directive. AB 1109 also requires reductions in energy usage for lighting and is structured to reduce lighting electrical consumption by: (1) At least 50 percent reduction from 2007 levels for indoor residential lighting; and (2) At least 25 percent reduction from 2007 levels for indoor commercial and all outdoor lighting by 2018. AB 1109 would reduce GHG emissions through reducing the amount of electricity required to be generated by fossil fuels in California.

Executive Order S-1-07

Executive Order S-1-07 was issued in 2007 and proclaims that the transportation sector is the main source of GHG emissions in the State, since it generates more than 40 percent of the State's GHG emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in the State by at least ten percent by 2020. This Executive Order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

In 2009 CARB approved the proposed regulation to implement the LCFS. The standard was challenged in the courts, but has been in effect since 2011 and was re-approved by the CARB in 2015. The LCFS is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. The LCFS is designed to provide a framework that uses market mechanisms to spur the steady introduction of lower carbon fuels. The framework establishes performance standards that fuel producers and importers must meet annually. Reformulated gasoline mixed with corn-derived ethanol and low-sulfur diesel fuel represent the baseline fuels. Lower carbon fuels may be ethanol, biodiesel, renewable diesel, or blends of these fuels with gasoline or diesel. Compressed natural gas and liquefied natural gas also may be low-carbon fuels. Hydrogen and electricity, when used in fuel cells or electric vehicles, are also considered as low-carbon fuels.

Senate Bill 97

Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Natural Resources Agency was required to certify and adopt those guidelines by January 1, 2010.

Pursuant to the requirements of SB 97 as stated above, on December 30, 2009 the Natural Resources Agency adopted amendments to the State CEQA guidelines that addresses GHG emissions. The CEQA Guidelines Amendments changed 14 sections of the CEQA Guidelines and incorporated GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance were provided and no specific mitigation measures were identified. The GHG emission reduction amendments went into effect on March 18, 2010 and are summarized below:

- Climate Action Plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the GHG emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of GHG emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."
- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports must specifically consider a project's energy use and energy efficiency potential.

Assembly Bill 32

In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires CARB, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020 through an enforceable statewide emission cap which will be phased in starting in 2012. Emission reductions shall include carbon sequestration projects that would remove carbon from the atmosphere and utilize best management practices that are technologically feasible and cost effective.

In 2007 CARB released the calculated Year 1990 GHG emissions of 431 million metric tons of CO2e ($MMTCO_2e$). The 2020 target of 431 $MMTCO_2e$ requires the reduction of 78 $MMTCO_2e$, or approximately 16 percent from the State's projected 2020 business as usual emissions of 509 $MMTCO_2e$ (CARB, 2014). Under AB 32, CARB was required to adopt regulations by January 1, 2011 to achieve reductions in GHGs to meet the 1990 cap by 2020. Early measures CARB took to lower GHG emissions included requiring operators of the largest industrial facilities that emit 25,000

metric tons of CO_2 in a calendar year to submit verification of GHG emissions by December 1, 2010. The CARB Board also approved nine discrete early action measures that include regulations affecting landfills, motor vehicle fuels, refrigerants in cars, port operations and other sources, all of which became enforceable on or before January 1, 2010.

CARB's Scoping Plan that was adopted in 2009, proposes a variety of measures including: strengthening energy efficiency and building standards; targeted fees on water and energy use; a market-based cap-and-trade system; achieving a 33 percent renewable energy mix; and a fee regulation to fund the program. The 2014 update to the Scoping Plan identifies strategies moving beyond the 2020 targets to the year 2050.

The Cap and Trade Program established under the Scoping Plan sets a statewide limit on sources responsible for 85 percent of California's GHG emissions, and has established a market for long-term investment in energy efficiency and cleaner fuels since 2012.

Executive Order S-3-05

In 2005 the California Governor issued Executive Order S 3-05, GHG Emission, which established the following reduction targets:

- 2010: Reduce greenhouse gas emissions to 2000 levels;
- 2020: Reduce greenhouse gas emissions to 1990 levels;
- 2050: Reduce greenhouse gas emissions to 80 percent below 1990 levels.

The Executive Order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. To comply with the Executive Order, the secretary of CalEPA created the California Climate Action Team (CAT), made up of members from various state agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of businesses, local governments, and communities and through State incentive and regulatory programs. The State achieved its first goal of reducing GHG emissions to 2000 levels by 2010.

Assembly Bill 1493

AB 1493 or the Pavley Bill sets tailpipe GHG emissions limits for passenger vehicles in California as well as fuel economy standards and is described in more detail above under Energy Conservation Management.

4.4 Regional – Southern California

California Assembly Bill 1493 (also known as the Pavley Bill, in reference to its author Fran Pavley) was enacted on July 22, 2002 and required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. In 2004, CARB approved the "Pavley I" regulations limiting the amount of GHGs that may be released from new passenger automobiles that are being phased in between model years 2009 through 2016. These regulations will reduce GHG emissions by 30 percent from 2002 levels by 2016. In June 2009, the EPA granted California the authority to implement GHG emission reduction standards for light duty vehicles, in September 2009, amendments to the Pavley I regulations were adopted by CARB and implementation of the "Pavley I" regulations started in 2009.

The second set of regulations "Pavley II" was developed in 2010, and is being phased in between model years 2017 through 2025 with the goal of reducing GHG emissions by 45 percent by the year 2020 as compared to the 2002 fleet. The Pavley II standards were developed by linking the GHG emissions and formerly separate toxic tailpipe emissions standards previously known as the "LEV III" (third stage of the Low Emission Vehicle standards) into a single regulatory framework. The new rules reduce emissions from gasoline-powered cars as well as promote zero-emissions auto technologies such as electricity and hydrogen, and through increasing the infrastructure for fueling hydrogen vehicles. In 2009, the EPA granted California the authority to implement the GHG standards for passenger cars, pickup trucks and sport utility vehicles and these GHG emissions standards are currently being implemented nationwide. However, EPA has performed a midterm evaluation of the longer-term standards for model years 2022-2025, and based on the findings of this midterm evaluation, the EPA has proposed to amend the corporate average fuel economy (CAFE) and GHG emissions standards for light vehicles for model years 2021 through 2026. The EPA's proposed amendments do not include any extension of the legal waiver granted to California by the 1970 Clean Air Act and which has allowed the State to set tighter standards for vehicle pipe emissions than the EPA standards. On September 20, 2019, California filed suit over the EPA decision to revoke California's legal waiver that has been joined by 22 other states.

South Coast Air Quality Management District

SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. The SCAQMD is also responsible for GHG emissions for projects where it is the lead agency. However, for other projects in the SCAB where it is not the lead agency, it is limited to providing resources to other lead agencies in order to assist them in determining GHG emission thresholds and GHG reduction measures. In order to assist local agencies with direction on GHG emissions, the SCAQMD organized a working group, which is described below.

SCAQMD Working Group

Since neither CARB nor the OPR has developed GHG emissions threshold, the SCAQMD formed a Working Group to develop significance thresholds related to GHG emissions. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that either provides a quantitative annual thresholds of 3,500 $MTCO_2e$ for residential uses, 1,400 $MTCO_2e$ for commercial uses, and 3,000 $MTCO_2e$ for mixed uses. An alternative annual threshold of 3,000 $MTCO_2e$ for all land use types was also proposed.

Southern California Association of Governments

The SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With respect to air quality planning, SCAG has prepared the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), adopted April, 2016 and the *2019 Federal Transportation Improvement* Program (FTIP), adopted September 2018, which addresses regional development and growth forecasts. Although the RTP/SCS and FTIP are

primarily planning documents for future transportation projects a key component of these plans are to integrate land use planning with transportation planning that promotes higher density infill development in close proximity to existing transit service. These plans form the basis for the land use and transportation components of the AQMP, which are utilized in the preparation of air quality forecasts and in the consistency analysis included in the AQMP. The RTP/SCS, FTIP, and AQMP are based on projections originating within the City and County General Plans.

4.5 Local – County of San Bernardino

Local jurisdictions, such as the County of San Bernardino, have the authority and responsibility to reduce GHG emissions through their police power and decision-making authority. Specifically, the County is responsible for the assessment and mitigation of GHG emissions resulting from its land use decisions. In accordance with CEQA requirements and the CEQA review process, the County assesses the global climate change potential of new development projects, requires mitigation of potentially significant global climate change impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

The *County of San Bernardino Greenhouse Gas Emissions Reduction Plan* (GHG Plan), prepared September, 2011, requires the reduction of 159,423 metric tons of $C0_2$ equivalent emissions ($MTCO_2e$) per year from new development by 2020 as compared to the unmitigated conditions. The *Greenhouse Gas Emissions Development Review Processes* (GHG Review Processes), prepared for the County of San Bernardino, March 2015, provides project level direction on how the County plans to achieve the reduction in GHG Emissions.

5 Atmospheric Setting

5.1 South Coast Air Basin

The project site is located within the western portion of San Bernardino County, which is part of the South Coast Air Basin (Air Basin) that includes the non-desert portions of Riverside, San Bernardino, and Los Angeles Counties and all of Orange County. The Air Basin is located on a coastal plain with connecting broad valleys and low hills to the east. Regionally, the Air Basin is bounded by the Pacific Ocean to the southwest and high mountains to the east forming the inland perimeter.

5.2 Local Climate

The climate of western San Bernardino County, technically called an interior valley subclimate of the Southern California's Mediterranean-type climate, is characterized by hot dry summers, mild moist winters with infrequent rainfall, moderate afternoon breezes, and generally fair weather. Occasional periods of strong Santa Ana winds and winter storms interrupt the otherwise mild weather pattern. The clouds and fog that form along the area's coastline rarely extend as far inland as western San Bernardino County. When morning clouds and fog form, they typically burn off quickly after sunrise. The most important weather pattern from an air quality perspective is associated with the warm season airflow across the densely populated areas located west of the project site. This airflow brings polluted air into western San Bernardino County late in the afternoon. This transport pattern creates unhealthful air quality that may extend to the project site particularly during the summer months.

Winds are an important parameter in characterizing the air quality environment of a project site because they both determine the regional pattern of air pollution transport and control the rate of dispersion near a source. Daytime winds in western San Bernardino County are usually light breezes from off the coast as air moves regionally onshore from the cool Pacific Ocean to the warm Mojave Desert interior of Southern California. These winds allow for good local mixing, but as discussed above, these coastal winds carry significant amounts of industrial and automobile air pollutants from the densely urbanized western portion of the Air Basin into the interior valleys which become trapped by the mountains that border the eastern and northern edges of the Air Basin.

In the summer, strong temperature inversions may occur that limit the vertical depth through which air pollution can be dispersed. Air pollutants concentrate because they cannot rise through the inversion layer and disperse. These inversions are more common and persistent during the summer months. Over time, sunlight produces photochemical reactions within this inversion layer that creates ozone, a particularly harmful air pollutant. Occasionally, strong thermal convections occur which allows the air pollutants to rise high enough to pass over the mountains and ultimately dilute the smog cloud.

In the winter, light nocturnal winds result mainly from the drainage of cool air off of the mountains toward the valley floor while the air aloft over the valley remains warm. This forms a type of inversion known as a radiation inversion. Such winds are characterized by stagnation and poor local mixing and trap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of the Air Basin, there is not enough traffic in inland valleys to cause any winter air pollution problems. Despite light wind

conditions, especially at night and in the early morning, winter is generally a period of good air quality in the project vicinity.

The temperature and precipitation levels for the Fontana Kaiser Station, which is the nearest weather station to the project site with historical data is shown below in Table 6. Table 6 shows that July is typically the warmest month and January is typically the coolest month. Rainfall in the project area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

Table 6 – Monthly Climate Data

Month	Average Maximum Temperature (°F)	Average Minimum Temperature (°F)	Average Total Precipitation (inches)
January	66.8	44.0	3.65
February	69.4	45.0	2.85
March	70.1	46.3	2.80
April	74.5	48.4	1.13
May	79.9	52.6	0.26
June	86.7	56.6	0.04
July	95.0	62.2	0.01
August	94.4	62.9	0.11
September	91.3	61.3	0.34
October	83.0	55.4	0.34
November	73.6	48.5	1.72
December	68.3	44.4	2.07
Annual	**79.4**	**52.3**	**15.32**

Source: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca3120

5.3 Monitored Local Air Quality

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the Air Basin. Estimates of the existing emissions in the Air Basin provided in the 2012 AQMP, indicate that collectively, mobile sources account for 59 percent of the VOC, 88 percent of the NOx emissions and 40 percent of directly emitted PM2.5, with another 10 percent of PM2.5 from road dust. The 2016 AQMP found that since 2012 AQMP projections were made stationary source VOC emissions have decreased by approximately 12 percent, but mobile VOC emissions have increased by 5 percent. The percentage of NOx emissions remain unchanged between the 2012 and 2016 projections.

SCAQMD has divided the Air Basin into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The project site is located in Air Monitoring Area 34, Central San Bernardino Valley, which covers the area from Fontana to the base of the San Bernardino Mountains. The nearest air monitoring station to the project site is the San Bernardino-4th Street Monitoring Station (San Bernardino Station), which is located approximately seven miles northeast of the project site at 24302 4th Street, San Bernardino. However, it should be noted that due to the air monitoring station's distance from the project site, recorded air pollution levels at the San Bernardino Station reflect with varying degrees of accuracy, local air quality conditions at the project site. The monitoring data is presented in Table 7 and shows the most recent three years of

monitoring data from CARB. CO measurements have not been provided, since CO is currently in attainment in the Air Basin and monitoring of CO within the Air Basin ended on March 31, 2013.

Table 7 – Local Area Air Quality Monitoring Summary

Pollutant (Standard)	Year[1] 2016	2017	2018
Ozone:			
Maximum 1-Hour Concentration (ppm)	0.158	0.158	0.138
Days > CAAQS (0.09 ppm)	**70**	**81**	**63**
Maximum 8-Hour Concentration (ppm)	0.118	0.136	0.116
Days > NAAQS (0.070 ppm)	**106**	**112**	**102**
Days > CAAQs (0.070 ppm)	**108**	**114**	**107**
Nitrogen Dioxide:			
Maximum 1-Hour Concentration (ppb)	60.1	65.8	57.3
Days > NAAQS (100 ppb)	0	0	0
Days > CAAQS (180 ppb)	0	0	0
Inhalable Particulates (PM10) :			
Maximum 24-Hour National Measurement (ug/m^3)	277.0	157.8	130.2
Days > NAAQS (150 ug/m^3)	**1**	**1**	0
Days > CAAQS (50 ug/m^3)	**7**	**14**	**5**
Annual Arithmetic Mean (AAM) (ug/m^3)	36.7	32.6	30.7
Annual > NAAQS (50 ug/m^3)	No	No	No
Annual > CAAQS (20 ug/m^3)	**Yes**	**Yes**	**Yes**
Ultra-Fine Particulates (PM2.5):			
Maximum 24-Hour National Measurement (ug/m^3)	53.5	38.2	30.1
Days > NAAQS (35 ug/m^3)	**1**	**1**	0
Annual Arithmetic Mean (AAM) (ug/m^3)	11.1	11.4	11.1
Annual > NAAQS and CAAQS (12 ug/m^3)	No	No	No

Notes: Exceedances are listed in **bold.** CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million; ppb = parts per billion; ND = no data available.
[1] Data obtained from the San Bernardino Station.
Source: http://www.arb.ca.gov/adam/

Ozone

During the last three years, the State 1-hour concentration standard for ozone has been exceeded between 63 and 81 days each year at the San Bernardino Station. The State 8-hour ozone standard has been exceeded between 107 and 114 days each year over the last three years at the San Bernardino Station. The Federal 8-hour ozone standard has been exceeded between 102 and 112 days each year over the last three years at the San Bernardino Station. Ozone is a secondary pollutant as it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO_2, which occur only in the presence of bright

sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of Southern California contribute to the ozone levels experienced at this monitoring station, with the more significant areas being those directly upwind.

Nitrogen Dioxide

The San Bernardino Station did not record an exceedance of either the Federal or State 1-hour NO_2 standards for the last three years.

Particulate Matter

The State 24-hour concentration standard for PM_{10} has been exceeded between 5 and 14 days each year over the past three years at the San Bernardino Station. Over the past three years the Federal 24-hour standard for PM_{10} has not been exceeded between 0 and 1 day each year over the past three years at the San Bernardino Station. The annual PM_{10} concentration at the San Bernardino Station has exceeded the State standard for the past three years and has not exceeded the Federal standard for the past three years.

Over the past three years the federal 24-hour concentration standard for $PM_{2.5}$ has been exceeded between 0 and 1 day each year over the past three years at the San Bernardino Station. The annual $PM_{2.5}$ concentrations at the San Bernardino Station has been within both the State and Federal standards for the past three years. There does not appear to be a noticeable trend for PM_{10} or $PM_{2.5}$ in either maximum particulate concentrations or days of exceedances in the area. Particulate levels in the area are due to natural sources, grading operations, and motor vehicles.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM_{10} and $PM_{2.5}$). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM_{10} and $PM_{2.5}$. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive, because many breathe through their mouths during exercise.

5.4 Toxic Air Contaminant Levels in the Air Basin

In order to determine the Air Basin-wide risks associated with major airborne carcinogens, the SCAQMD conducted the Multiple Air Toxics Exposure Study (MATES) studies. According to the SCAQMD's MATES-IV study, the project site has an estimated cancer risk of 772 per million persons chance of cancer. In comparison, the average cancer risk for the Air Basin is 991 per million persons, which is based on the use of age-sensitivity factors detailed in the OEHHA Guidelines (OEHHA, 2015).

In order to provide a perspective of risk, it is often estimated that the incidence in cancer over a lifetime for the U.S. population ranges between 1 in 3 to 4 and 1 in 3, or a risk of about 300,000 per million persons. The MATES-III study referenced a Harvard Report on Cancer Prevention, which estimated that of cancers associated with known risk factors, about 30 percent were related to tobacco, about 30 percent were related to diet and obesity, and about 2 percent were associated with environmental pollution related exposures that includes hazardous air pollutants.

6 Modeling Parameters and Assumptions

6.1 CalEEMod Model Input Parameters

The criteria air pollution and GHG emissions impacts created by the proposed project have been analyzed through use of CalEEMod Version 2016.3.2. CalEEMod is a computer model published by the CAPCOA for estimating air pollutant emissions. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour.

The project characteristics in the CalEEMod model were set to a project location of South Coast Air Basin portion of San Bernardino County, a Climate Zone of 10, utility company of Southern California Edison and an opening year of 2023 was utilized in this analysis.

Land Use Parameters

The proposed project consist of a gas station with two fuel canopies that includes a 8 Multiple Product Dispenser (MPD) automobile fuel station under one canopy and a 7 MPD truck fuel station under the second canopy with a truck scale, in addition to an approximate 9,900 square foot (SF) convenience store; one (1) 3,000 SF quick service restaurant with a drive thru; and one (1) 2,800 SF quick service restaurant with a drive thru. The proposed project would also include a paved parking lot with a total of 149 parking spaces that includes 10 ADA parking spaces and 40 truck parking spaces and would also include onsite driveways as well as improvements to the portions of Cedar Avenue and Santa Ana Avenue that are adjacent to the project site. The proposed project's land use parameters that were entered into the CalEEMod model are shown in Table 8.

Table 8 – CalEEMod Land Use Parameters

Proposed Land Use	Land Use Subtype in CalEEMod	Land Use Size[1]	Lot Acreage[2]	Building/Paving[3] (square feet)
Gas Station and Truck Scale	Gasoline/Service Station	15 Pump	0.25	2,118
Convenience Store	Convenience Market	9.90 TSF	1.17	9,900
Two Quick Serve Restaurants with Drive Thru	Fast Food Restaurant with Drive Thru	5.80 TSF	0.66	5,800
Parking Lot and Road Improvements	Parking Lot	149 PS	6.81	59,600

Notes:
[1] TSF = Thousand Square Feet; PS = Parking Space
[2] Lot acreage calculated based on the total project area of 8.9-acres.
[3] Building/Paving square feet represent area where architectural coatings will be applied.

Electricity Emission Factors

The default CalEEMod emission factors for Southern California Edison (from the CEC's year 2012 data) are as follows:

- Carbon dioxide: 702.44 pounds per megawatt-hour
- Methane: 0.029 pounds per megawatt-hour
- Nitrous oxide: 0.006 pounds per megawatt-hour

According to the *Edison International 2019 Sustainability Report,* in the year 2019 the CO_2e emissions from delivered electricity was 475 pounds per megawatt-hour (MWh). This equates to a 32.4 percent reduction to the CalEEMod default intensity factors and the resultant intensity factors that have been utilized in this analysis are shown below:

- Carbon dioxide: 475 pounds per megawatt-hour
- Methane: 0.020 pounds per megawatt-hour
- Nitrous oxide: 0.004 pounds per megawatt-hour

It should be noted that the use of the above intensity factors is a conservative estimate as they are based on the year 2019 rates and by opening year 2025, the SCE GHG emissions intensity factors are anticipated to be much lower.

Construction Parameters

Construction activities have been modeled as starting in January 2021 and taking 14 months to complete. The construction-related GHG emissions were based on a 30-year amortization rate as recommended in the SCAQMD GHG Working Group meeting on November 19, 2009. The phases of construction activities that have been analyzed are detailed below and include: 1) Site Preparation; 2) Grading, 3) Building construction, 4) Application of architectural coatings, and 5) Paving.

Site Preparation

The site preparation phase would consist of removing any vegetation, tree stumps, and stones onsite prior to grading. The site preparation phase was modeled as starting in January 2021 and was modeled as occurring over two weeks, which is based on the CalEEMod default timing. The site preparation activities would require 18 worker trips per day. In order to account for water truck emissions, six vendor truck emissions were added to the site preparation phase. The onsite equipment would consist of three rubber tired dozers, and four of either tractors, loaders, or backhoes, which is based on the CalEEMod default equipment mix. The mitigation of water all exposed areas two times per day was chosen in order to account for the fugitive dust reduction that would occur through adhering to SCAQMD Rule 403, which requires that the Best Available Control Measures be utilized to reduce fugitive dust emissions.

Grading

The grading phase would occur after completion of the site preparation phase and was modeled as occurring over four weeks days, which is based on the CalEEMod default timing. The grading activities are anticipated to balanced, which would require no dirt to be imported or exported from the project site. The onsite equipment utilized during the grading phase was based on the CalEEMod default equipment list of one excavator, one grader, one rubber tired dozer, and three of either tractors, loaders, or backhoes which is based on the CalEEMod default equipment mix. The grading activities would generate 15 worker trips per day. In order to account for water truck emissions, six daily vendor truck trips were added to the grading phase. The mitigation of water all exposed areas two times per day was chosen in order to account for the fugitive dust reduction that would occur through adhering to SCAQMD Rule 403, which requires that the Best Available Control Measures be utilized to reduce fugitive dust emissions.

Building Construction

The building construction phase would consist of construction of the gas station with convenience market, and two quick serve restaurants with drive throughs. The building construction would occur after the completion of the grading phase and was modeled as occurring over 11 months, which is based on the CalEEMod default timing. The building construction phase would generate 31 worker trips and 13 vendor trips per day. The onsite equipment would consist of the simultaneous operation of one crane, three forklifts, one generator, one welder, and three of either tractors, loaders, or backhoes, which is based on the CalEEMod default equipment mix.

Paving

The paving phase would consist of paving the onsite parking lots and driveways as well as the proposed improvements to Cedar Avenue and Santa Ana Avenue adjacent to the project site. The paving phase was modeled as occurring over four weeks and starting after completion of the building construction phase. The paving phase would generate 15 worker trips per day. The onsite equipment would consist of the simultaneous operation of two pavers, two paving equipment, and two rollers, which is based on the CalEEMod default equipment mix.

Architectural Coating

The application of architectural coatings was modeled as occurring after completion of the paving phase. The architectural coating phase was modeled based on covering 26,726 square feet of non-residential interior area, 8,909 square feet of non-residential exterior area, and 3,576 square feet of parking area. The architectural coating phase would generate six worker trips per day. The onsite equipment would consist of one air compressor, which is based on the CalEEMod default equipment mix.

Operational Emissions Modeling

The operations-related criteria air pollutant emissions and GHG emissions created by the proposed project have been analyzed through use of the CalEEMod model. The proposed project was analyzed in the CalEEMod model based on the land use parameters provided above.

Mobile Sources

Mobile sources include emissions the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project were obtained from the *Final Traffic Impact Study for the Bloomington Commercial Center at SEC of Cedar Avenue and Santa Ana Avenue* (Traffic Impact Study), prepared by Minagar & Associates, Inc., June 18, 2020, which found that the proposed project would generate a gross total of 7,152 daily trips. It should be noted that the Traffic Impact Study utilized Institute of Transportation Engineers (ITE) Land Use 905 – Truck Stops to analyze the entire project (gas station, convenience store and two fast food restaurants with drive thrus), however Land Use 945 is not available in CalEEMod, as such the Gas Station, Convenience Market, and fast food restaurant with drive thru land uses were utilized in the CalEEMod model. All trips generated from the proposed project were analyzed under the gas station land use and the rest of the land use trip rates were set to zero.

The CalEEMod model provides the selection of “mitigation” to account for project conditions that would result in less emissions than a project without these conditions, however it should be noted that this “mitigation” may represent current conditions, such as development that is in close

proximity to an existing bus stop, where a project built at such location, would create less vehicle trips and associated emissions than a project that was not built in close proximity to an existing bus stop. The mobile source emissions analysis included the CalEEMod mitigation of improved pedestrian network onsite, since the proposed project would include construction of sidewalks on the project site adjacent to Santa Ana Avenue and Cedar Avenue. In addition, the CalEEMod mitigation of increase transit accessibility was also selected in order to account for the Omnitrans bus stop that is located on the project site.

CalEEMod, version 2016.3.2 incorporates CARB's 2014 Emission Factor Model (EMFAC) (EMFAC2014). However, the currently approved EMFAC model is EMFAC2017, version 1.03, (EMFAC2017). Therefore, to present the most accurate emission estimate for this analysis operational mobile sources were calculated outside CalEEMod using EMFAC2017 and the VMT calculated in CalEEMod. Results of the EMFAC2017 emission calculations are included in Appendix A.

Area Sources

Area sources include emissions from consumer products, landscape equipment and architectural coatings. The area source emissions were based on the on-going use of the proposed project in the CalEEMod model. No changes were made to the default area source parameters in the CalEEMod model.

Energy Usage

Energy usage includes emissions from electricity and natural gas used onsite. The energy usage was based on the ongoing use of the proposed project in the CalEEMod Model. No changes were made to the default energy usage parameters in the CalEEMod model.

The new 2019 Title 24, Part 6 building energy efficiency standards went into effect January 1, 2020 and require new lighting energy improvements that are 30 percent more efficient than the prior 2016 building standards. In order to account for the new standards, the CalEEMod mitigation of 30 percent lighting energy improvement was selected.

Solid Waste

Waste includes the GHG emissions associated with the processing of waste from the proposed project as well as the GHG emissions from the waste once it is interred into a landfill. The analysis was based on the default CalEEMod waste generation rates of 105 tons of solid waste per year from the proposed project. No changes were made to the default solid waste parameters or mitigation measures in the CalEEMod model.

The CalEEMod mitigation of a 50 percent reduction in landfill waste was selected to account for implementation of AB 341 that provides strategies to reduce, recycle or compost solid waste by 75 percent by 2020. Only 50 percent was selected, since AB 341 builds upon the waste reduction measures of SB 939 and 1374 and therefore, it was assumed approximately 25 percent of the waste reduction target has already been accounted for in the CalEEMod model.

Water and Wastewater

Water includes the water used for the interior of the buildings as well as for landscaping and is based on the GHG emissions associated with the energy used to transport and filter the water. The analysis was based on the default CalEEMod water usage rate of 2,693,042 gallons per year of

indoor water use and 683,933 gallons per year of outdoor water use. No changes were made to the default water and wastewater parameters in the CalEEMod model.

The CalEEMod mitigation of the use of low flow faucets, showers, and toilets and use of smart irrigation system controllers were selected to account for the implementation of the 2016 CCR Title 24 Part 11 (CALGreen) requirements.

6.2 Gasoline Transfer and Dispensing VOC Modeling

The proposed project would include a gas station that is anticipated to have a maximum throughput of 2.5 million gallons of gasoline per year. Since the CalEEMod model does not analyze the VOC emissions created from the transfer and dispensing of gasoline at the proposed gas station, the VOC emissions have been calculated through use of the methodology provided in *Gasoline Service Station Industrywide Risk Assessment Guidelines* (CAPCOA Gas Station Guidelines), prepared by CAPCOA, November 1997 and from SCAQMD Rule 461 – Gasoline Transfer and Dispensing.

SCAQMD Rule 461 requires that the proposed underground storage tanks are equipped with a "CARB certified" enhanced vapor recovery system with "CARB- certified" pressure-vacuum valves that have a minimum volumetric efficiency of 98 percent that equates to a maximum emission factor of 0.15 pounds of VOC per 1,000 gallons of gasoline from the loading of gasoline into the storage tanks (Phase I system). In addition, Rule 461 requires that the dispensing unit for the transfer of gasoline into vehicle fuel tanks (Phase II system) is equipped with a "CARB certified" vapor recovery system that is capable of recovering 95 percent of gasoline vapors that equates to a maximum emission factor of 0.38 pounds per 1,000 gallons. The combined VOC emissions allowed from both the Phase I and Phase II systems under SCAQMD Rule 461 is 0.53 pounds of VOC per 1,000 gallons of gasoline (0.15 + 0.38 = 0.53 pounds of VOC). Based on the maximum VOC emission rate of 0.53 pounds of VOC per 1,000 gallons for a gas station with 3.6 million gallons of gasoline per year, this would create 1,368 pounds of VOC per year or 5.23 pounds of VOC per day.

However, the CAPCOA Gas Station Guidelines, details that a system that would meet SCAQMD Rule 461 requirements with both Phase I and Phase II systems with vent valves would create 1.27 pounds of VOC per 1,000 gallons of gasoline (see Scenario 6B). The emission rate calculated for Scenario 6B represents a worst-case analysis that accounts for equipment failures or defects in the vapor recovery systems. Based on the maximum VOC emission rate of 1.27 pounds of VOC per 1,000 gallons for a gas station with 3.6 million gallons of gasoline per year, this would create 4,572 pounds of VOC per year or 9.94 pounds of VOC per day. This analysis has utilized the worst-case VOC emissions calculations from the CAPCOA Gas Station Guidelines.

6.3 TAC Emissions Modeling

The dispersion modeling utilized for analyzing the TAC emissions in this analysis has been based on the recommended methodology described in *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel idling Emissions for CEQA Air Quality Analysis* (SCAQMD HRA Guidance), prepared by SCAQMD, 2003, and *Air Toxics Hot Spots Program Risk Assessment Guidelines* (OEHHA Guidelines), prepared by Office of Environmental Health Hazard, February 2015, and the USEPA Guidelines for Carcinogenic Risk Assessment (USEPA 2005). Important issues that affect the dispersion modeling include the following: 1) Model Selection, 2) Source Treatment, 3) Meteorological Data, and 4) Receptor Grid. Each of these issues is addressed below.

Model Selection

The AERMOD View Version 9.9.0 Model was used for all dispersion modeling. Key dispersion modeling options selected included the regulatory default options and urban modeling option for San Bernardino County with a population of 2,035,210. Flagpole receptor height was set to 0 meters. AERMAP (the terrain pre-processor for AERMOD) was run with a 7.5 minute USGS DEM Map named Fontana.

Meteorological Data

Meteorological data from SCAQMD's Fontana monitoring site was selected for this modeling application, since this is the nearest monitoring site with meteorological data available to the project site. Five full years of sequential meteorological data were collected at the Fontana Station by the SCAQMD for the years 2011, 2012, 2013, 2015, and 2016. The SCAQMD processed the data for input to the model. An elevation of 367 meters was utilized for the Fontana Station.

Receptor Grid

Discrete receptors were placed at 11 representative nearby homes that are located on all sides of the project site. Figure 3 shows the locations of the sources and receptors modeled in the AERMOD model for TAC emissions.

TAC Emission Sources

The operation of the proposed project would create TAC emissions from diesel-powered vehicles, which are detailed below.

Project-Related Truck Emissions

According to the Traffic Impact Analysis, the proposed project would result in 3,190 4+ axle, 644 3-axle, and 157 2-axle truck trips accessing the site per day. The project would only generate approximately 45 percent of the traffic accessing the site since 55 percent of the traffic is considered pass by trips, which means it is on the road already. Therefore, the project-related truck emissions have been analyzed separately for truck travel and truck idling that occur on-site.

EMFAC Model

The truck travel and truck idling emission rates were obtained from the EMFAC2017 model Version 1.0.3. The EMFAC2017 model is the latest emissions inventory model released by CARB that calculates motor vehicle emissions from vehicles operating on roads in California. The EMFAC2017 includes the latest data on California's car and truck fleets and travel activity and also reflects the emissions reductions associated with CARB's recent rulemaking, including on-road diesel fleet rules, Advanced Clean Car Standards, and the Smartway/Phase I Heavy-Duty Vehicle GHG Regulations. The EMFAC model was run for calendar years 2021 through 2050. The EMFAC model run was based on the South Coast Air Basin portion of San Bernardino County and modeled the Truck 1 and Truck 2 vehicle categories in the EMFAC model. The Truck 1 category covers all truck classifications between 8,500 and 14,000 pounds and was utilized to analyze the 2-axle truck trips. The Truck 2 category covers all truck classifications over 14,000 pounds and was utilized to analyze the 3-axle and 4+-axle truck trips. Since vehicle emission factors are dependent on vehicle speed, emission factors were obtained for 10 and 40 miles per hour and idling rates. The EMFAC2017 model run printout is provided in Appendix B.

Truck Travel

The onsite diesel truck travel was modeled based on the most direct onsite route from Driveway 1 (Cedar Avenue Driveway) to Driveway 3 (Santa Ana East Driveway). Offsite truck travel was modeled for Cedar Avenue and Santa Ana Avenue in the vicinity of the project site. The emission rates utilized in the AERMOD model were calculated by converting the emissions created for one truck to grams per second and then calculating the time it takes to travel the road length and multiplying this time by the per day and then dividing by 24 hours. The calculated emission rates are shown in Table 9. The diesel truck line volume source truck routes were modeled with a 6 foot height and 12 foot width for the onsite roads and a 40 foot width on Cedar Avenue and Santa Ana Avenue.

Table 9 – AERMOD Model DPM Truck Travel Emissions Sources

Source ID	Description	Daily Truck Trips[1]	Length of Truck Route (meters)	DPM Emission Rates (grams/second)		
				2021-2023	2024-2038	2039-2050
Onsite						
	Light Truck Trips	157	310	1.81E-05	1.05E-05	6.08E-06
	Medium & Heavy Truck Trips	3,833	310	4.43E-04	7.27E-05	6.69E-05
RDON	**Onsite Driveway 1 to Driveway 3**	**74**	**--**	**4.61E-04**	**8.32E-05**	**7.30E-05**
Offsite Roads						
	Light Truck Trips	63	372	2.96E-06	1.96E-06	1.32E-06
	Medium & Heavy Truck Trips	1,533	372	1.06E-04	3.56E-05	3.46E-05
RDCEDARN	**Cedar Ave north of Santa Ana Ave**	**1,596**	**--**	**1.09E-04**	**3.75E-05**	**3.59E-05**
	Light Truck Trips	51	126	8.14E-07	5.39E-07	3.63E-07
	Medium & Heavy Truck Trips	1,246	126	2,93E-05	9.79E-06	9.52E-06
RDCEDARM	**Cedar Ave south of Santa Ana Ave**	**1,297**	**--**	**3.01E-05**	**1.03E-05**	**9.88E-06**
	Light Truck Trips	39	467	2.32E-06	1.54E-06	1.04E-06
	Medium & Heavy Truck Trips	958	467	8.35E-05	2.79E-05	2.71E-05
RDCEDARS	**Cedar Ave south of Driveway 1**	**998**	**--**	**8.58E-05**	**2.95E-05**	**2.82E-05**
	Light Truck Trips	28	375	1.30E-06	8.64E-07	5.82E-07
	Medium & Heavy Truck Trips	671	375	4.69E-05	1.57E-05	1.53E-05
RDSANTAW	**Santa Ana Ave west of Cedar Ave**	**698**	**--**	**4.82E-05**	**1.66E-05**	**1.58E-05**
	Light Truck Trips	94	167	1.99E-06	1.32E-06	8.89E-07
	Medium & Heavy Truck Trips	2,300	167	7.16E-05	2.40E-05	2.33E-05
RDSANTAM	**Santa Ana Ave east of Cedar Ave**	**2,394**	**--**	**7.36E-05**	**2.53E-05**	**2.42E-05**
	Light Truck Trips	16	364	7.24E-07	4.79E-07	3.23E-07
	Medium & Heavy Truck Trips	383	364	2.60E-5	8.71E-06	8.46E-06
RDSANTAE	**Santa Ana Ave east of Driveway 3**	**399**	**--**	**2.67E-05**	**9.18E-06**	**8.78E-06**

Notes:
[1] Daily truck trips represent one-way trips (i.e., entering the project site or leaving the project site equal one trip).
Source: Minagar & Associates, Inc., 2020.

Onsite Truck Idling

The onsite diesel truck idling emissions were modeled as a point source located in the center of the diesel truck fuel canopy. The analysis was based on each truck idling on the project site for 15 minutes or 5 minutes for arriving at the project site, 5 minutes for leaving the project site, and 5 minutes for queueing activities on the project site. The 5-minute period is based on Section 2485 of the California Code of Regulations that limits commercial truck idling to 5 minutes at any location. The emission factors used for the truck idling point source was based on the EMFAC2014 idling emission rates that are shown in Table 10. The EMFAC2017 model run printouts are provided in Appendix B.

Table 10 – EMFAC2017 Idling Trucks Emission Rates

Scenario	EMFAC2017 PM10 Emission Rates (grams/hour)	
	Light Trucks[1]	Medium and Heavy Trucks
Average Year 2021 to 2023	0.793	0.025
Average Years 2024 to 2038	0.792	0.012
Average Years 2039 to 2050	0.796	0.010

Notes:
[1] Light Trucks from Trucks 1 Scenario in EMFAC2017
[2] Medium and Heavy Trucks from Trucks 2 Scenario in EMFAC2017.
Source: EMFAC2017 Model Version 1.0.2.

The idling point source was modeled in the AERMOD model with a 12.6-foot height, a 0.1-meter diameter, a velocity of 50 meters per second, and a temperature of 366°K. The idling point source emission rates entered into the AERMOD model are shown in Table 11. The idling source emissions were determined by multiplying 15 minutes by the daily truck operations and dividing it by 24 hours in order to determine the percent of daily idling time. The daily idling time was then multiplied by the EMFAC2017 emissions rates that are detailed above and were converted to grams per second.

Table 11 – AERMOD Model DPM Truck Idling Emissions Sources

Source ID	Description	Daily Truck Visits[1]	DPM Emission Rates (grams/second)		
			2021-2023	2024-2038	2039-2050
	Light Truck Idling	79	1.80E-04	1.80E-04	1.81E-04
	Medium & Heavy Truck Idling	1,917	1.39E-04	6.66E-05	5.61E-05
IDLING	**Idling Total**	**1,995**	**3.19E-04**	**2.474E-04**	**2.37E-04**

Notes:
[1] Each daily truck visit represent two trips (i.e., one entering the project site and one leaving the project site).
Source: EMFAC2017; Minagar & Associates, Inc., 2020.

7 Thresholds of Significance

7.1 Regional Air Quality

Many air quality impacts that derive from dispersed mobile sources, which are the dominate pollution generators in the Air Basin, often occurs hours later and miles away after photochemical processes have converted primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally very small and difficult to measure. Therefore, SCAQMD has developed significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. The SCAQMD CEQA Handbook states that any project in the Air Basin with daily emissions that exceed any of the identified significance thresholds should be considered as having an individually and cumulatively significant air quality impact. For the purposes to this air quality impact analysis, a regional air quality impact would be considered significant if emissions exceed the SCAQMD significance thresholds identified in Table 12.

Table 12 – SCAQMD Regional Criteria Pollutant Emission Thresholds of Significance

	Pollutant Emissions (pounds/day)						
	VOC	NOx	CO	SOx	PM10	PM2.5	Lead
Construction	75	100	550	150	150	55	3
Operation	55	55	550	150	150	55	3

Source: SCAQMD 2015

7.2 Local Air Quality

Project-related construction air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. In order to assess local air quality impacts the SCAQMD has developed Localized Significant Thresholds (LSTs) to assess the project-related air emissions in the project vicinity. SCAQMD has also provided *Final Localized Significance Threshold Methodology* (LST Methodology), July 2008, which details the methodology to analyze local air emission impacts. The LST Methodology found that the primary emissions of concern are NO_2, CO, PM10, and PM2.5.

The LST Methodology provides Look-Up Tables with different thresholds based on the location and size of the project site and distance to the nearest sensitive receptors. As detailed above, the project site is located in Air Monitoring Area 34, which covers central San Bernardino Valley. The Look-Up Tables provided in the LST Methodology include project site acreage sizes of 1-acre, 2-acres and 5-acres. The 5-acre project site values in the Look-Up Tables have been utilized in this analysis, since that is the nearest size available for the 8.9-acre project site. The nearest offsite sensitive receptors include at residents at the mobile home park that are located as near as 85 feet (26 meters) north of the project site. As such, the 25 meter threshold has been utilized in this analysis. Table 13 below shows the LSTs for NO_2, PM10 and PM2.5 for both construction and operational activities.

Table 13 – SCAQMD Local Air Quality Thresholds of Significance

Activity	Allowable Emissions (pounds/day)[1]			
	NOx	CO	PM10	PM2.5
Construction	270	1,746	14	8
Operation	270	1,746	4	2

Notes:
[1] The nearest offsite sensitive receptors are mobile homes located as near as 85 feet (26 meters) north of the project site. As such, the 25 meter threshold was utilized.
Source: Calculated from SCAQMD's Mass Rate Look-up Tables for five acres in Air Monitoring Area 34, Central San Bernardino Valley.

7.3 Toxic Air Contaminants

According to the SCAQMD CEQA Handbook, any project that has the potential to expose the public to toxic air contaminants in excess of the following thresholds would be considered to have a significant air quality impact:

- If the Maximum Incremental Cancer Risk is 10 in one million or greater; or
- Toxic air contaminants from the proposed project would result in a Hazard Index increase of 1 or greater.

In order to determine if the proposed project may have a significant impact related to toxic air contaminants (TACs), the *Health Risk Assessment Guidance for analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*, (Diesel Analysis) prepared by SCAQMD, August 2003, recommends that if the proposed project is anticipated to create TACs through stationary sources or regular operations of diesel trucks on the project site, then the proximity of the nearest receptors to the source of the TAC and the toxicity of the hazardous air pollutant (HAP) should be analyzed through a comprehensive facility-wide health risk assessment (HRA).

7.4 Odor Impacts

The SCAQMD CEQA Handbook states that an odor impact would occur if the proposed project creates an odor nuisance pursuant to SCAQMD Rule 402, which states:

> "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
>
> The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."

If the proposed project results in a violation of Rule 402 with regards to odor impacts, then the proposed project would create a significant odor impact.

7.5 Greenhouse Gas Emissions

The County of San Bernardino GHG Emissions Reduction Plan (GHG Plan) requires the reduction of 159,423 metric tons of $C0_2$ equivalent emissions ($MTCO_2e$) per year from new development by 2020 as compared to the unmitigated conditions. The GHG Review Processes, provides project level

direction on how the County plans to achieve the reduction in GHG Emissions. The GHG Review Processes determined that projects that do not exceed 3,000 $MTCO_2e$ per year will be consistent with the GHG Plan and determined to have a less than significant individual and cumulative impact for GHG emissions. For projects that exceed 3,000 $MTCO_2e$ per year of GHG emissions the applicant may choose to either: utilize the Screening Tables, which consist of a list of mitigation measures, rated for their effectiveness and provide mitigation to reach 100 points; or provide a detailed GHG analysis that quantifies project design features or mitigation measures in order to reduce GHG emissions by 31 percent or more over year 2020 unmitigated GHG emissions levels.

8 Impact Analysis

8.1 CEQA Thresholds of Significance

Consistent with CEQA and the State CEQA Guidelines, a significant impact related to air quality, energy, and GHG emissions would occur if the proposed project is determined to:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations;
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

8.2 Air Quality Compliance

The proposed project may conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan (AQMP). The following section discusses the proposed project's consistency with the SCAQMD AQMP.

SCAQMD Air Quality Management Plan

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD AQMP. Therefore, this section discusses any potential inconsistencies of the proposed project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that the proposed project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

(2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criterion 1 - Increase in the Frequency or Severity of Violations?

Based on the air quality modeling analysis contained in this report, short-term regional construction air emissions would not result in significant impacts based on SCAQMD regional thresholds of significance or local thresholds of significance. The ongoing operation of the proposed project would generate air pollutant emissions that are inconsequential on a regional basis and would not result in significant impacts based on SCAQMD thresholds of significance. The analysis for long-term local air quality impacts showed that local pollutant concentrations would not be projected to exceed the air quality standards. Therefore, a less than significant long-term impact would occur and no mitigation would be required.

Therefore, based on the information provided above, the proposed project would be consistent with the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The AQMP is developed through use of the planning forecasts provided in the RTP/SCS and FTIP. The RTP/SCS is a major planning document for the regional transportation and land use network within Southern California. The RTP/SCS is a long-range plan that is required by federal and state requirements placed on SCAG and is updated every four years. The FTIP provides long-range planning for future transportation improvement projects that are constructed with state and/or federal funds within Southern California. Local governments are required to use these plans as the basis of their plans for the purpose of consistency with applicable regional plans under CEQA. For this project, the Bloomington Community Plan prepared by the County of San Bernardino defines the assumptions that are represented in AQMP.

The proposed project is currently designated as Single-Family Residential (RS-1) in the Community Plan and is zoned Single-Family Residential (RS-1-AA). The proposed project would require a Community Plan Amendment and zone change to Commercial. Although the proposed project is currently inconsistent with the General Plan land use designation and zoning for the project site, the proposed project would be consistent with the adjacent commercial land uses to the west and would be in substantial compliance with the Land Use Element goals and policies. Therefore, due to the proposed project's nominal size and consistency with the surrounding neighborhood, the proposed project would not result in an inconsistency with the current land use designations with respect to the regional forecasts utilized by the AQMPs. Furthermore, the proposed project consists of a commercial development in an area of Southern California that has a shortage of employment opportunities. As such, the proposed project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion

Based on the above, the proposed project will not result in an inconsistency with the SCAQMD AQMP. Therefore, a less than significant impact will occur in relation to implementation of the AQMP.

8.3 Cumulative Net Increase in Non-Attainment Pollution

The proposed project may result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard. The following section calculates the potential air emissions associated with the construction and operations of the proposed project and compares the emissions to the SCAQMD standards.

Construction Emissions

The construction activities for the proposed project are anticipated to include site preparation and grading of the project site, building construction and application of architectural coatings to the proposed gas station, convenience market and two restaurants with drive thrus, and paving of the proposed parking lot and driveways. The construction emissions have been analyzed for both regional and local air quality impacts.

Construction-Related Regional Impacts

The CalEEMod model has been utilized to calculate the construction-related regional emissions from the proposed. The worst-case summer or winter daily construction-related criteria pollutant emissions from the proposed project for each phase of construction activities are shown below in Table 14 and the CalEEMod daily printouts are shown in Appendix A. Since it is likely that building construction, paving, and application of architectural coating activities would occur concurrently, these activities have been analyzed together in Table 14.

Table 14 – Construction-Related Regional Criteria Pollutant Emissions

	Pollutant Emissions (pounds/day)					
Activity	**VOC**	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Site Preparation[1]						
Onsite	3.89	40.50	21.15	0.04	10.17	6.35
Offsite	0.11	0.64	0.85	0.00	0.24	0.07
Total	**4.00**	**41.13**	**22.01**	**0.04**	**10.42**	**6.42**
Grading[1]						
Onsite	2.29	24.74	15.86	0.03	4.11	2.58
Offsite	0.09	0.63	0.73	0.00	0.21	0.06
Total	**2.38**	**25.36**	**16.59**	**0.03**	**4.32**	**2.64**
Building Construction, Paving, and Architectural Coatings						
Onsite	13.19	29.96	32.97	0.05	1.61	1.50
Offsite	0.29	1.41	2.32	0.01	0.67	0.18
Total	**13.48**	**31.38**	**35.29**	**0.05**	**2.28**	**1.69**
Maximum Daily Construction Emissions	**13.48**	**41.13**	**35.29**	**0.05**	**10.42**	**6.42**
SCQAMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	No	No	No	No	No

	Pollutant Emissions (pounds/day)					
Activity	**VOC**	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**

Notes:
[1] Site Preparation and Grading based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.
[2] Onsite emissions from equipment not operated on public roads.
[3] Offsite emissions from vehicles operating on public roads.
Source: CalEEMod Version 2016.3.2.

Table 14 shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds during either site preparation, grading, the combined building construction, paving and architectural coatings phases. Therefore, a less than significant regional air quality impact would occur from construction of the proposed project.

Construction-Related Local Impacts

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin.

The local air quality emissions from construction were analyzed through utilizing the methodology described in *Localized Significance Threshold Methodology* (LST Methodology), prepared by SCAQMD, revised October 2009. The LST Methodology found the primary criteria pollutant emissions of concern are NO_x, CO, PM_{10}, and $PM_{2.5}$. In order to determine if any of these pollutants require a detailed analysis of the local air quality impacts, each phase of construction was screened using the SCAQMD's Mass Rate LST Look-up Tables. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily onsite emissions of CO, NO_x, PM_{10}, and $PM_{2.5}$ from the proposed project could result in a significant impact to the local air quality. Table 15 shows the onsite emissions from the CalEEMod model for the different construction phases and the calculated localized emissions thresholds that have been detailed above. Since it is likely that building construction and application of architectural coating activities would occur concurrently, these activities have been analyzed together in Table 15.

Table 15 – Construction-Related Local Criteria Pollutant Emissions

	Onsite Pollutant Emissions (pounds/day)			
Phase	**NOx**	**CO**	**PM10**	**PM2.5**
Site Preparation[1]	40.50	21.15	10.17	6.35
Grading[1]	24.74	15.86	4.11	2.58
Building Construction, Paving and Architectural Coatings	29.96	32.97	1.61	1.50
Maximum Daily Construction Emissions	**40.50**	**32.97**	**10.17**	**6.35**
SCAQMD Local Construction Thresholds[2]	**270**	**1,746**	**14**	**8**
Exceeds Threshold?	No	No	No	No

Notes:
[1] Site Preparation and Grading based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.
[2] The nearest offsite sensitive receptors are mobile homes located as near as 85 feet (26 meters) north of the project site. As such, the 25 meter threshold was utilized.
Source: Calculated from SCAQMD's Mass Rate Look-up Tables for five acres in Air Monitoring Area 34, Central San Bernardino Valley.

The data provided in Table 15 shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds during either site preparation, grading, or the combined building construction, paving and architectural coatings phases. Therefore, a less than significant local air quality impact would occur from construction of the proposed project.

Operational Emissions

The on-going operation of the proposed project would result in a long-term increase in air quality emissions. This increase would be due to emissions from the project-generated vehicle trips, emissions from energy usage, and onsite area source emissions created from the on-going use of the proposed project. The following section provides an analysis of potential long-term air quality impacts due to regional air quality and local air quality impacts with the on-going operations of the proposed project.

Operations-Related Regional Criteria Pollutant Analysis

The operations-related regional criteria air quality impacts created by the proposed project have been analyzed through use of the CalEEMod. The VOC emissions created from the proposed gas station's storage and dispensing of gasoline have been analyzed through use of the CAPCOA Gas Station Guidelines. The worst-case summer or winter VOC, NOx, CO, SO_2, PM10, and PM2.5 daily emissions created from the proposed project's long-term operations have been calculated and are summarized below in Table 16 and the CalEEMod daily emissions printouts are shown in Appendix A.

Table 16 – Operational Regional Criteria Pollutant Emissions

	Pollutant Emissions (pounds/day)					
Activity	**VOC**	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Area Sources[1]	0.43	0.00	0.02	0.00	0.00	0.00
Energy Usage[2]	0.05	0.45	0.38	0.00	0.03	0.03
Mobile Sources[3]	7.54	5.99	46.79	0.08	1.09	0.48
Gasoline Storage and Dispensing[4]	12.53	0.00	0.00	0.00	0.00	0.00
Total Emissions	**20.97**	**6.84**	**47.58**	**0.08**	**1.12**	**0.51**
SCQAMD Operational Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	**No**	No	No	No	No

Notes:
[1] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[2] Energy usage consist of emissions from natural gas usage.
[3] Mobile sources consist of emissions from vehicles and road dust.
[4] Gasoline storage and dispensing VOC emissions rate based on 1.27 pounds of VOC per 1,000 gallons of gasoline throughput, based on a maximum throughput of 2.5 million gallons of gasoline per year.
Source: Calculated from CalEEMod Version 2016.3.2, EMFAC 2017, and CAPCOA, 1997.

The data provided in Table 16 shows that operational emissions would not exceed the SCAQMD's regional emissions thresholds. This would be considered a significant impact. Since there is no mitigation available to reduce this impact to a less than significant level, this would result in a significant unavoidable impact.

Operations-Related Local Air Quality Impacts

Project-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. The proposed project has been analyzed for the potential local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from on-site operations. The following analyzes the vehicular CO emissions and local impacts from on-site operations.

LOCAL CO HOTSPOT IMPACTS FROM PROJECT-GENERATED VEHICULAR TRIPS

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards of 20 ppm over one hour or 9 ppm over eight hours.

At the time of the 1993 Handbook, the Air Basin was designated nonattainment under the CAAQS and NAAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Air Basin and in the state have steadily declined. In 2007, the Air Basin was designated in attainment for CO under both the CAAQS and NAAQS. SCAQMD conducted a CO hot spot analysis for attainment at the busiest intersections in Los Angeles[1] during the peak morning and afternoon periods and did not predict a violation of CO standards. Since the nearby intersections to the proposed project are much smaller with less traffic than what was analyzed by the SCAQMD, no local CO Hotspot are anticipated to be created from the proposed project and no CO Hotspot modeling was performed. Therefore, a less than significant long-term air quality impact is anticipated to local air quality with the on-going use of the proposed project.

LOCAL CRITERIA POLLUTANT IMPACTS FROM ONSITE OPERATIONS

Project-related air emissions from onsite sources such as architectural coatings, landscaping equipment, and onsite usage of natural gas appliances may have the potential to create emissions areas that exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin.

The local air quality emissions from onsite operations were analyzed using the SCAQMD's Mass Rate LST Look-up Tables and the methodology described in LST Methodology. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NO_x, PM_{10}, and $PM_{2.5}$ from the proposed project could result in a significant impact to the local air quality. Table 17 shows the onsite emissions from the CalEEMod model that includes area sources, energy usage, and vehicles operating in the immediate vicinity of the project site and the calculated emissions thresholds.

Table 17 – Operations-Related Local Criteria Pollutant Emissions

	Pollutant Emissions (pounds/day)			
Onsite Emission Source	**NOx**	**CO**	**PM10**	**PM2.5**
Area Sources	0.00	0.02	0.00	0.00
Energy Usage	0.45	0.38	0.03	0.03
Onsite Vehicle Emissions[1]	1.58	1.52	0.25	0.07
Total Emissions	**2.03**	**1.92**	**0.28**	**0.10**
SCAQMD Local Operational Thresholds[2]	**270**	**1,746**	**4**	**2**
Exceeds Threshold?	No	No	No	No

[1] The four intersections analyzed by the SCAQMD were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning and LOS F in the evening peak hour.

Notes:
[1] Onsite vehicle emissions based on 2.5 percent of the gross vehicular emissions, which is the estimated portion of vehicle emissions occurring within a quarter mile of the project site (0.25 mile / CalEEMod default trip length of 10.16 mile = 2.5%).
[2] The nearest offsite sensitive receptors are mobile homes located as near as 85 feet (26 meters) north of the project site. As such, the 25 meter threshold was utilized.
Source: Calculated from SCAQMD's Mass Rate Look-up Tables for five acres in Air Monitoring Area 34, Central San Bernardino Valley.

The data provided in Table 17 shows that the on-going operations of the proposed project would not exceed the local CO, NO_x, PM_{10}, and $PM_{2.5}$ thresholds of significance. Therefore, the on-going operations of the proposed project would create a less than significant operations-related impact to local air quality due to onsite emissions and no mitigation would be required.

Therefore, the proposed project would result in a significant unavoidable cumulatively considerable net increase of NO_x emissions, which is a precursor to ozone that is a criteria pollutant.

8.4 Sensitive Receptors

The proposed project may expose sensitive receptors to substantial pollutant concentrations. The discussion below also includes an analysis of the potential impacts from toxic air contaminant emissions. The nearest sensitive receptors to the project site are residents at the mobile home park that are located as near as 85 feet north of the project site.

Construction-Related Sensitive Receptor Impacts

The construction activities for the proposed project are anticipated to include site preparation and grading of the project site, building construction and application of architectural coatings to the proposed gas station, convenience market and two restaurants with drive thrus, and paving of the proposed parking lot and driveways. Construction activities may expose sensitive receptors to substantial pollutant concentrations of localized criteria pollutant concentrations and from toxic air contaminant emissions created from onsite construction equipment, which are described below.

Local Criteria Pollutant Impacts from Construction

The local air quality impacts from construction of the proposed project has been analyzed above and found that the construction of the proposed project would not exceed the local criteria pollutant thresholds of significance. Therefore, construction of the proposed project would create a less than significant construction-related impact to local air quality and no mitigation would be required.

Toxic Air Contaminants Impacts from Construction

The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the proposed project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. It should be noted that the most current cancer risk assessment methodology recommends analyzing a 30 year exposure period for the nearby sensitive receptors (OEHHA, 2015).

Given the relatively limited number of heavy-duty construction equipment, the varying distances that construction equipment would operate to the nearby sensitive receptors, and the short-term construction schedule, the proposed project would not result in a long-term (i.e., 30 or 70 years)

substantial source of toxic air contaminant emissions and corresponding individual cancer risk. In addition, California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 regulates emissions from off-road diesel equipment in California. This regulation limits idling of equipment to no more than five minutes, requires equipment operators to label each piece of equipment and provide annual reports to CARB of their fleet's usage and emissions. This regulation also requires systematic upgrading of the emission Tier level of each fleet, and currently no commercial operator is allowed to purchase Tier 0 or Tier 1 equipment and by January 2023 no commercial operator is allowed to purchase Tier 2 equipment. In addition to the purchase restrictions, equipment operators need to meet fleet average emissions targets that become more stringent each year between years 2014 and 2023. As of January, 2019, 25 percent or more of all contractors' equipment fleets must be Tier 2 or higher. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed project. As such, construction of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Operations-Related Sensitive Receptor Impacts

The on-going operations of the proposed project may expose sensitive receptors to substantial pollutant concentrations of local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from onsite operations. The following analyzes the vehicular CO emissions. Local criteria pollutant impacts from onsite operations, and toxic air contaminant impacts.

Local CO Hotspot Impacts from Project-Generated Vehicle Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential impacts to sensitive receptors. The analysis provided above shows that no local CO Hotspots are anticipated to be created at any nearby intersections from the vehicle traffic generated by the proposed project. Therefore, operation of the proposed project would result in a less than significant exposure of offsite sensitive receptors to substantial pollutant concentrations.

Local Criteria Pollutant Impacts from Onsite Operations

The local air quality impacts from the operation of the proposed project would occur from onsite sources such as architectural coatings, landscaping equipment, and onsite usage of natural gas appliances. The analysis provided above found that the operation of the proposed project would not exceed the local criteria pollutant thresholds of significance. Therefore, the on-going operations of the proposed project would create a less than significant operations-related impact to local air quality due to on-site emissions and no mitigation would be required.

Construction Toxic Air Contaminant Emissions

The greatest potential for TAC emissions during construction would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during site preparation, grading, and building construction. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. The

most current cancer risk assessment methodology recommends analyzing a 30-year exposure period for the nearby sensitive receptors (Office of Environmental Health Hazard Assessment [OEHHA] 2015).

Given the relatively limited number of heavy duty construction equipment, the varying distances that construction equipment would operate to the nearby sensitive receptors, and the short-term construction schedule, the proposed project would not result in a long-term (i.e., 30 or 70 years) substantial source of TAC emissions and corresponding individual cancer risk. In addition, California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 regulates emissions from off-road diesel equipment in California. This regulation limits idling of equipment to no more than five minutes, requires equipment operators to label each piece of equipment and provide annual reports to the California Air Resources Board (CARB) of their fleet's usage and emissions. This regulation also requires systematic upgrading of the emission Tier level of each fleet, and currently no commercial operator is allowed to purchase Tier 0 or Tier 1 equipment. As of January 2019, 25 percent or more of all contractors' equipment fleets must be Tier 2 or higher. Therefore, no significant short-term TAC impacts would occur during construction of the proposed project. As such, construction would not expose sensitive receptors to substantial pollutant concentrations, and this impact would be less than significant.

Operational Carbon Monoxide Hotspots

A 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 parts per million (ppm) or the federal and state eight-hour standard of 9.0 ppm (CARB 2016).

The SCAB is in conformance with state and federal CO standards, and most air quality monitoring stations no longer report CO levels. No stations within the vicinity of the project site have monitored CO since 2012. In 2012, the Fontana – Arrow Highway station detected an 8-hour average CO concentration of 1.76 ppm, which is substantially below the state and federal standards (CARB 2020). The proposed project would result in CO emissions of 62 pounds per day, well below the 550 pounds per day threshold. Based on the low background level of CO in the project area, improving vehicle emissions standards for new cars in accordance with state and federal regulations, and the project's low level of operational CO emissions, the project would not create new hotspots or contribute substantially to existing hotspots, and impacts would be less than significant.

Operational Toxic Air Contaminant Emissions

The proposed project would include a gasoline dispensing facility with eight gasoline fueling positions located on the northwest corner of the project site. The proposed gasoline dispensing facility is anticipated to have a maximum throughput of 2.5 million gallons of gasoline per year. Additionally, the project would include a truck stop, including a seven-position diesel fueling canopy on the northeastern portion of the site. CARB identifies both gasoline dispensing facilities and truck stops as potential sources of TACs (CARB 2005). Health risk impacts associated with each of these project components is described below.

Gasoline Dispensing Facility

Health risk associated with the proposed gasoline dispensing facility was evaluated using SCAQMD's RiskTool (V1.103). The nearest sensitive receptors, mobile homes located north of the project site

across Santa Ana Avenue, are located approximately 60 meters (197 feet) from the proposed gasoline storage tanks on the northwest corner of the project site. The RiskTool found that the proposed gasoline dispensing facility would result in a cancer risk of approximately 2.56 in one million at the nearest residence. This falls below SCAQMD's health risk criteria of 10 in one million. Furthermore, the project would be subject to SCAQMD Rule 461, requiring CARB-certified vapor recovery systems for fuel tank loading and dispensing units. Therefore, TAC emissions and associated health risk from the proposed gasoline dispensing facility would result in a less than significant impact.

Truck Stop

The project would involve construction and operation of a truck stop, which would generate diesel emissions from truck traffic. DPM is a TAC, as diesel exhaust particulates are readily respirable and have hundreds of chemicals adsorbed onto their surfaces. The potential TAC impacts to nearby sensitive receptors have been analyzed through emissions calculations and air dispersion modeling included in Appendix B, and health risk calculations prepared by Rincon Consultants in accordance with the OEHHA *Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 2015) and USEPA *Guidelines for Carcinogenic Risk Assessment* (USEPA 2005).

Emissions from truck travel along Santa Ana Avenue and Cedar Avenue, as well as on-site truck circulation and idling, we considered for the health risk analysis. Truck travel and truck idling emission rates were obtained from the EMFAC2017 model Version 1.0.3, the latest emissions inventory model released by CARB that calculates motor vehicle emissions from vehicles operating on roads in California. EMFAC2017 was run for calendar years 2021 through 2050. Emissions calculations were based on total on-site truck activity of 3,190 four-axle truck trips, 644 three-axle truck trips, and 157 two-axle truck trips per day, as indicated in the project-specific traffic study. The emissions factors assume travel speeds of 40 miles per hour (mph) on Santa Ana Avenue and Cedar Avenue, 10 mph on-site, and up to 15 minutes of on-site idling per truck.

To determine ground-level concentrations of DPM at nearby sensitive receptors, air dispersion modeling was conducted using the Lakes AMS/EPA Regulatory Model (AERMOD) View, Version 9.9.0. Dispersion modeling was conducted in accordance with SCAQMD guidance, using regulatory default options, urban modeling option based on the SCAQMD-recommended San Bernardino County population, topographic data from the U.S. Geological Survey Fontana Quadrangle Digital Elevation Model, and meteorological data from SCAQMD's Fontana monitoring station. Receptors were sited at 11 representative nearby homes on all sides of the project site, including the mobile homes immediately north of the project site across Santa Ana Avenue. Table 18 summarizes ground-level concentrations of DPM at each of the 11 receptor locations based on the air dispersion modeling outputs.

Table 18 - Annual TAC Concentrations at Nearby Sensitive Receptors

Receptor	Description	Annual PM_{10} Concentration ($\mu g/m^3$)			30-Year Weighted Average Concentration
		2021-2023	2024-2038	2039-2050	
1	MH to north (740 feet)	0.0358	0.0124	0.0008	0.0101
2	MH to north (90 feet)	0.0560	0.0200	0.0009	0.0160
3	MH to north (90 feet)	0.0608	0.0215	0.0011	0.0173
4	SFH to northeast (110 feet)	0.0537	0.0194	0.0013	0.0156
5	SFH to east (730 feet)	0.0192	0.0073	0.0009	0.0059

6	SFH to east (750 feet)	0.0089	0.0032	0.0008	0.0028
7	SFH to southeast (890 feet)	0.0057	0.0020	0.0008	0.0019
8	SFH to south (1,020 feet)	0.0271	0.0096	0.0007	0.0078
9	SFH to southwest (230 feet)	0.0285	0.0103	0.0006	0.0082
10	SFH to west (580 feet)	0.0202	0.0073	0.0007	0.0060
11	MFH to northwest (575 feet)	0.0149	0.0054	0.0001	0.0042

MH = mobile home, SFH = single-family home, MFH = multi-family home, µg/m^3 = micrograms per cubic meter, PM_{10} = particulate matter less than 10 microns in diameter (used as proxy for diesel particulate matter)
Note: 30-year weighted average are the average annual PM_{10} ground-level concentration at each receptor when accounting for annual concentrations during each time frame.
Source: Appendix B

Potential risk values associated with construction emissions were quantified based on USEPA's *Guidelines for Carcinogen Risk Assessment* (USEPA 2005) and OEHHA's *Risk Assessment Guidelines* (OEHHA 2015). Risk calculations were based on the 30-year weighted average ground-level concentrations modeled by AERMOD at off-site receptors, presented in Table 18.

Consistent with SCAQMD recommendations, fraction-of-time-at-home adjustments were applied for the over 16 years age class. USEPA recommends the use of age-dependent-adjustment factors for TACs which act through a mutagenic mode of action, as cancer risks from such compounds would be expected to be higher from early-life exposure than from similar exposure later in life. Application of these age-sensitivity factors to non-mutagenic carcinogens is not recommended by USEPA, as the data for non-mutagenic carcinogens are considered to be too limited and the modes of action too diverse to use this as a category for which a general default adjustment factor approach can be applied. To date, USEPA reports that whole diesel engine exhaust has not been shown to elicit a mutagenic mode of action. Therefore, consistent with USEPA guidance on risk analysis, "a linear low-dose extrapolation approach" was applied for DPM in the quantification of cancer risk (USEPA 2005). It is the USEPA's "long-standing science policy position" that this approach "provides adequate public health conservatism in the absence of chemical-specific data indicating differential early-life sensitivity or when the mode of action is not mutagenic" (USEPA 2005).

Based on the ground-level concentrations of DPM modeled in AERMOD, DPM inhalation dose estimates were estimated using the following equation (OEHHA 2015):

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

Where:

$Dose_{air}$ = dose through inhalation (mg/kg/day)
C_{air} = concentration of DPM in air (µg/m^3), as modeled in AERMOD
{BR/BW} = daily breathing rate normalized to body weight (L/kg body weight per day)
A = inhalation absorption factor (unitless)
EF = exposure frequency (days/365 days)
10^{-6} = micrograms to milligrams conversion

Inhalation cancer risk estimates for the identified age groups were estimated based on the following equation (OEHHA 2015):

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

Where:

$Risk_{inh}$ = inhalation cancer risk
$Dose_{air}$ = dose through inhalation (mg/kg/day)
CPF = cancer potency factor (mg/kg/day^{-1})
ED = exposure duration for age group (years)
AT = averaging time (70 years)
FAH = fraction of time at home (1 for age groups <16; 0.73 for age groups >16)

Table 19 summarizes cancer and non-carcinogenic (chronic) health risk associated with operation of the proposed truck stop at off-site receptors. As shown in Table 19, the maximally exposed individual receptor would be exposed to a 30-year cancer risk of approximately 4.21 in one million and a non-carcinogenic chronic hazard index of 0.004. Both of these values remain below the SCAQMD health risk criteria of 10 in one million cancer risk and chronic hazard index of 1.0. DPM is not associated with acute health risks (OEHHA 2019); therefore, acute risk was not evaluated.

Table 19 - Health Risk Associated with Truck Stop at Nearby Sensitive Receptors

Receptor	Description	30-Year Cancer Risk[1]	Exceeds Threshold?[2]	Chronic Hazard Index[3]	Exceeds Threshold?[4]
1	MH to north (740 feet)	2.46	No	0.002	No
2	MH to north (90 feet)	3.89	No	0.003	No
3	MH to north (90 feet)	4.21	No	0.004	No
4	SFH to northeast (110 feet)	3.79	No	0.003	No
5	SFH to east (730 feet)	1.44	No	0.001	No
6	SFH to east (750 feet)	0.68	No	<0.001	No
7	SFH to southeast (890 feet)	0.46	No	<0.001	No
8	SFH to south (1,020 feet)	1.90	No	0.002	No
9	SFH to southwest (230 feet)	1.99	No	0.002	No
10	SFH to west (580 feet)	1.46	No	0.001	No
11	MFH to northwest (575 feet)	1.02	No	<0.001	No

MH = mobile home, SFH = single-family home, MFH = multi-family home, $\mu g/m^3$ = micrograms per cubic meter, PM_{10} = particulate matter less than 10 microns in diameter (used as proxy for diesel particulate matter).

[1] 30-year cancer risk expressed in risk per one million.

[2] Per South Coast Air Quality Management District health risk criteria, cancer risk threshold is 10 in one million or greater.

[3] Non-carcinogenic chronic health hazard is expressed as a unitless index.

[4] Per South Coast Air Quality Management District health risk criteria, non-cancer chronic health risk threshold is a hazard index of 1.0 or greater.

Based on the analysis above, operation of the proposed truck stop would not result in off-site health risks in excess of SCAQMD health risk criteria. This impact would be less than significant.

Non-Cancer Risks

In addition to the cancer risk from exposure to TAC emissions there is also the potential TAC exposure may result in adverse health impacts from acute and chronic illnesses, which are detailed below.

Chronic Health Impacts

Chronic health effects are characterized by prolonged or repeated exposure to a TAC over many days, months, or years. Symptoms from chronic health impacts may not be immediately apparent and are often irreversible. The chronic hazard index is based on the most impacted sensitive receptor from the proposed project and is calculated from the annual average concentrations of PM10. The relationship for non-cancer chronic health effects is given by the equation:

$$HI_{DPM} = C_{DPM} / REL_{DPM}$$

Where,

HI_{DPM} = Hazard Index; an expression of the potential for non-cancer health effects.

C_{DPM} = Annual average diesel particulate matter concentration in $\mu g/m^3$.

REL_{DPM}= Reference Exposure Level (REL) for diesel particulate matter; the diesel particulate matter concentration at which no adverse health effects are anticipated.

The REL_{DPM} is 5 $\mu g/m^3$. The Office of Environmental Health Hazard Assessment as protective for the respiratory system has established this concentration. As shown above in Table 18, the AERMOD model found that the highest annual off-site concentration is 0.0608 $\mu g/m^3$ for DPM chronic non-cancer risk emissions. The resulting Hazard Index is:

$$HI_{DPM} = 0.0173/5 = 0.00346$$

The criterion for significance is a Chronic Hazard Index increase of 1.0 or greater. Therefore, the on-going operations of the proposed project would result in a less than significant impact due to the non-cancer chronic health risk from TAC emissions created by the proposed project.

8.5 Odor Emissions Adversely Affecting a Substantial Number of People

Individual responses to odors are highly variable and can result in a variety of effects. Generally, the impact of an odor results from a variety of factors such as frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in the ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

Sensory perception has four major components: detectability, intensity, character, and hedonic tone. The detection (or threshold) of an odor is based on a panel of responses to the odor. There are two types of thresholds: the odor detection threshold and the recognition threshold. The detection threshold is the lowest concentration of an odor that will elicit a response in a percentage of the people that live and work in the immediate vicinity of the project site and is typically presented as the mean (or 50 percent of the population). The recognition threshold is the minimum concentration that is recognized as having a characteristic odor quality, this is typically represented by recognition by 50 percent of the population. The intensity refers to the perceived strength of the odor. The odor character is what the substance smells like. The hedonic tone is a judgment of the

pleasantness or unpleasantness of the odor. The hedonic tone varies in subjective experience, frequency, odor character, odor intensity, and duration. Potential odor impacts have been analyzed separately for construction and operations below.

Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints and solvents and from emissions from diesel equipment. Standard construction requirements that limit the time of day when construction may occur as well as SCAQMD Rule 1108 that limits VOC content in asphalt and Rule 1113 that limits the VOC content in paints and solvents would minimize odor impacts from construction. As such, the objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. Through compliance with the applicable regulations that reduce odors and due to the transitory nature of construction odors, a less than significant odor impact would occur and no mitigation would be required.

Operations-Related Odor Impacts

The proposed project would consist of the development of a gas station with a convenience market and carwash, and fast food restaurants without and with drive thrus. Potential sources that may emit odors during the on-going operations of the proposed project would primarily occur from odor emissions from gas dispensing activities and from the trash storage areas. Pursuant to SCAQMD Rule 461 the proposed gas station will be required to utilize gas dispensing equipment that minimizes vapor and liquid leaks and requires that the equipment be maintained at proper working order, which will minimize odor impacts occurring from the gasoline and diesel dispensing facilities. Pursuant to City regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Through compliance with SCAQMD's Rule 461 and City trash storage regulations, no significant impact related to odors would occur during the on-going operations of the proposed project. Therefore, a less than significant odor impact would occur and no mitigation would be required.

8.6 Generation of Greenhouse Gas Emissions

The proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The proposed project would consist of development of a commercial center. The proposed project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste disposal, water usage, and construction equipment. The project's GHG emissions have been calculated with the CalEEMod model based on the construction and operational parameters detailed above. A summary of the results is shown below in Table 20.

Table 20 – Project Related Greenhouse Gas Annual Emissions

	Greenhouse Gas Emissions (Metric Tons per Year)			
Category	**CO2**	**CH4**	**N2O**	**CO2e**
Area Sources[1]	<0.00	<0.00	<0.00	<0.00
Energy Usage[2]	182.95	0.01	<0.00	183.80
Mobile Sources[3]	2,760.37	0.30	<0.00	2,767.94
Solid Waste[4]	10.62	0.63	<0.00	26.31
Water and Wastewater[5]	8.78	0.07	<0.00	11.05
Construction[6]	13.61	<0.00	<0.00	13.69
Total GHG Emissions	2,976.33	1.01	<0.00	**3,002.79**
County of San Bernardino GHG Emissions Reduction Plan Screening Threshold				**3,000**
Exceed Screening Threshold?				**Yes**

Notes:
[1] Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.
[2] Energy usage consists of GHG emissions from electricity and natural gas usage.
[3] Mobile sources consist of GHG emissions from vehicles.
[4] Waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.
[5] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
[6] Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.
Source: CalEEMod Version 2016.3.2.

The data provided in Table 20 shows that the proposed project would create 3,002.79 $MTCO_2e$ per year, which would exceed the County's bright line screening threshold of 3,000 $MTCO_2e$ per year. This would be considered a significant impact.

Mitigation Measure 1 is included in this analysis that requires the project applicant to complete the County's GHG Emission Reduction Screening Tables, which requires the project applicant to commit to 100 points of GHG emissions reduction measures that are listed in the Screening Tables. According to the County's GHG Emissions Reduction Plan, any project that adopts at least 100 points of GHG reduction measures listed in the Screening Tables, the proposed project would be consistent with the County's GHG Plan. Therefore, with implementation of Mitigation Measure 1, the proposed project would not create a significant cumulative impact from GHG emissions.

Mitigation Measures

GHG-1: The project applicant shall implement a minimum of 100 points of GHG reduction measures listed in the County's GHG Emissions Screening Tables.

Level of Significance After Mitigation

Less than significant impact.

8.7 Greenhouse Gas Plan Consistency

The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The applicable plan for the proposed project is the *County of San Bernardino Greenhouse Gas Emissions Reduction Plan* (GHG Plan), September 2011. In addition, the G*reenhouse Gas Emissions Development Review Processes* (GHG Review

Processes), prepared for the County of San Bernardino, updated March 2015, provide direction for conformity of new development projects to the GHG Plan. The GHG Review Processes determined that projects that do not exceed 3,000 $MTCO_2e$ per year will be consistent with the GHG Plan and determined to have a less than significant individual and cumulative impact for GHG emissions. For projects that exceed 3,000 $MTCO_2e$ per year of GHG emissions, the GHG Review Processes has determined that implementation of 100 or greater points associated with mitigation measures listed on its Screen Tables, will adequately reduce the proposed project's GHG emissions, when considered with other future development and existing development to allow the County to meet its 2020 target GHG reductions and support reductions in GHG emissions beyond 2020.

As shown above, the proposed project would create 3,002.79 $MTCO_2e$ per year, which would exceed the 3,000 $MTCO_2e$ per year screening threshold provided in the GHG Review Processes. This would be considered a significant impact.

Mitigation Measure GHG-1 is included in this analysis that requires the project applicant to complete the County's GHG Emission Reduction Screening Tables, which requires the project applicant to commit to 100 points of GHG emissions reduction measures that are listed in the Screening Tables. According to the County's GHG Emissions Reduction Plan, any project that adopts at least 100 points of GHG reduction measures listed in the Screening Tables, the proposed project would be consistent with the County's GHG Plan. Therefore, with implementation of Mitigation Measure GHG-1, the proposed project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Mitigation Measures

Mitigation Measure GHG-1 is provided above.

Level of Significance After Mitigation

Less than significant impact.

9 References

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Appendix A

CalEEMod and EMFAC 2017 Outputs

Bloomington Commercial Center

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	149.00	Space	6.81	59,600.00	0
Fast Food Restaurant with Drive Thru	5.80	1000sqft	0.66	5,800.00	0
Convenience Market (24 Hour)	9.90	1000sqft	1.17	9,900.00	0
Gasoline/Service Station	15.00	Pump	0.25	2,117.62	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	507	**CH4 Intensity (lb/MWhr)**	0.021	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Bloomington Commercial Center - San Bernardino-South Coast County, Summer

Project Characteristics - SCE Intensity Factors reduced by 27.8% per Edison International 2018 Sustainability Report

Land Use - Total Project site 8.9 acres

Construction Phase - Construction schedule provided by applicant

Trips and VMT - 6 Vendor Trucks/Day added to Site Preparation and Grading Phases to account for Water Truck Emissions

Vehicle Trips - Daily Trip Rate from TIA

Energy Use -

Construction Off-road Equipment Mitigation - Water Exposed Area 2x per day selected to account for SCAQMD Rule 403 Minimum Requirements

Mobile Land Use Mitigation - Improve Pedestrian Network Onsite; Increase Transit Accesibility 0.01 mile to Omnitrans Bus 29 Stop on project site.

Energy Mitigation - Per 2019 Title 24 requirements a 30% improvement to lighting was selected

Water Mitigation - Install low-flow fixtures and water-efficient irrigation

Waste Mitigation - 50% reduction in solid waste selected to account for AB 341

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	2/24/2022	2/25/2022
tblConstructionPhase	PhaseEndDate	1/27/2022	1/28/2022
tblConstructionPhase	PhaseStartDate	1/28/2022	1/29/2022
tblConstructionPhase	PhaseStartDate	12/31/2021	1/1/2022
tblLandUse	LotAcreage	1.34	6.81
tblLandUse	LotAcreage	0.13	0.66
tblLandUse	LotAcreage	0.23	1.17
tblLandUse	LotAcreage	0.05	0.25
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	702.44	507
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblVehicleTrips	ST_TR	863.10	0.00
tblVehicleTrips	ST_TR	722.03	0.00
tblVehicleTrips	ST_TR	168.56	476.80
tblVehicleTrips	SU_TR	758.45	0.00
tblVehicleTrips	SU_TR	542.72	0.00
tblVehicleTrips	SU_TR	168.56	476.80
tblVehicleTrips	WD_TR	737.99	0.00
tblVehicleTrips	WD_TR	496.12	0.00
tblVehicleTrips	WD_TR	168.56	476.80

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9952	41.1323	22.0083	0.0416	18.3059	2.0467	20.3526	9.9951	1.8830	11.8781	0.0000	4,053.3450	4,053.3450	1.2084	0.0000	4,083.5553
2022	9.3202	11.1672	15.1509	0.0244	0.1677	0.5689	0.7366	0.0445	0.5234	0.5679	0.0000	2,365.8507	2,365.8507	0.7182	0.0000	2,383.8055
Maximum	**9.3202**	**41.1323**	**22.0083**	**0.0416**	**18.3059**	**2.0467**	**20.3526**	**9.9951**	**1.8830**	**11.8781**	**0.0000**	**4,053.3450**	**4,053.3450**	**1.2084**	**0.0000**	**4,083.5553**

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					
2021	3.9952	41.1322	22.0083	0.0416	8.3695	2.0467	10.4162	4.5332	1.8830	6.4163	0.0000	4,053.3450	4,053.3450	1.2084	0.0000	4,083.5553
2022	9.3202	11.1672	15.1509	0.0244	0.1677	0.5689	0.7366	0.0445	0.5234	0.5679	0.0000	2,365.8507	2,365.8507	0.7182	0.0000	2,383.8055
Maximum	**9.3202**	**41.1322**	**22.0083**	**0.0416**	**8.3695**	**2.0467**	**10.4162**	**4.5332**	**1.8830**	**6.4163**	**0.0000**	**4,053.3450**	**4,053.3450**	**1.2084**	**0.0000**	**4,083.5553**

	ROG	NOx	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**	**53.79**	**0.00**	**47.12**	**54.40**	**0.00**	**43.88**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	0.4254	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419
Energy	0.0495	0.4504	0.3783	2.7000e-003		0.0342	0.0342		0.0342	0.0342		540.4453	540.4453	0.0104	9.9100e-003	543.6569

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	0.4254	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419
Energy	0.0495	0.4504	0.3783	2.7000e-003		0.0342	0.0342		0.0342	0.0342		540.4453	540.4453	0.0104	9.9100e-003	543.6569

	ROG	NOx	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	**2.37**	**3.52**	**12.75**	**14.85**	**25.01**	**12.86**	**24.81**	**25.01**	**12.72**	**24.31**	**0.00**	**14.51**	**14.51**	**5.69**	**0.00**	**14.49**

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	1/1/2021	1/14/2021	5	10	
2	Grading	Grading	1/15/2021	2/11/2021	5	20	
3	Building Construction	Building Construction	2/12/2021	12/30/2021	5	230	
4	Paving	Paving	1/1/2022	1/28/2022	5	20	
5	Architectural Coating	Architectural Coating	1/29/2022	2/25/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 6.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 26,726; Non-Residential Outdoor: 8,909; Striped Parking Area: 3,576 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	31.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2021

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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
Vendor	0.0155	0.5786	0.1089	1.6200e-003	0.0384	9.9000e-004	0.0394	0.0111	9.5000e-004	0.0120		170.7536	170.7536	0.0108		171.0234
Worker	0.0915	0.0565	0.7452	1.9800e-003	0.2012	1.2900e-003	0.2025	0.0534	1.1900e-003	0.0545		196.9345	196.9345	5.6000e-003		197.0746
Total	**0.1070**	**0.6352**	**0.8541**	**3.6000e-003**	**0.2396**	**2.2800e-003**	**0.2419**	**0.0644**	**2.1400e-003**	**0.0666**		**367.6881**	**367.6881**	**0.0164**		**368.0980**

3.2 Site Preparation - 2021

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**8.1298**	**2.0445**	**10.1743**	**4.4688**	**1.8809**	**6.3497**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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
Vendor	0.0155	0.5786	0.1089	1.6200e-003	0.0384	9.9000e-004	0.0394	0.0111	9.5000e-004	0.0120		170.7536	170.7536	0.0108		171.0234
Worker	0.0915	0.0565	0.7452	1.9800e-003	0.2012	1.2900e-003	0.2025	0.0534	1.1900e-003	0.0545		196.9345	196.9345	5.6000e-003		197.0746
Total	**0.1070**	**0.6352**	**0.8541**	**3.6000e-003**	**0.2396**	**2.2800e-003**	**0.2419**	**0.0644**	**2.1400e-003**	**0.0666**		**367.6881**	**367.6881**	**0.0164**		**368.0980**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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
Vendor	0.0155	0.5786	0.1089	1.6200e-003	0.0384	9.9000e-004	0.0394	0.0111	9.5000e-004	0.0120		170.7536	170.7536	0.0108		171.0234
Worker	0.0762	0.0471	0.6210	1.6500e-003	0.1677	1.0700e-003	0.1687	0.0445	9.9000e-004	0.0455		164.1121	164.1121	4.6700e-003		164.2289
Total	**0.0917**	**0.6257**	**0.7299**	**3.2700e-003**	**0.2061**	**2.0600e-003**	**0.2082**	**0.0555**	**1.9400e-003**	**0.0575**		**334.8657**	**334.8657**	**0.0155**		**335.2522**

3.3 Grading - 2021

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**2.9486**	**1.1599**	**4.1085**	**1.5154**	**1.0671**	**2.5825**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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
Vendor	0.0155	0.5786	0.1089	1.6200e-003	0.0384	9.9000e-004	0.0394	0.0111	9.5000e-004	0.0120		170.7536	170.7536	0.0108		171.0234
Worker	0.0762	0.0471	0.6210	1.6500e-003	0.1677	1.0700e-003	0.1687	0.0445	9.9000e-004	0.0455		164.1121	164.1121	4.6700e-003		164.2289
Total	**0.0917**	**0.6257**	**0.7299**	**3.2700e-003**	**0.2061**	**2.0600e-003**	**0.2082**	**0.0555**	**1.9400e-003**	**0.0575**		**334.8657**	**334.8657**	**0.0155**		**335.2522**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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
Vendor	0.0336	1.2537	0.2359	3.5100e-003	0.0833	2.1500e-003	0.0854	0.0240	2.0600e-003	0.0260		369.9661	369.9661	0.0234		370.5506
Worker	0.1575	0.0974	1.2834	3.4100e-003	0.3465	2.2200e-003	0.3487	0.0919	2.0400e-003	0.0939		339.1650	339.1650	9.6500e-003		339.4063
Total	**0.1912**	**1.3511**	**1.5193**	**6.9200e-003**	**0.4298**	**4.3700e-003**	**0.4341**	**0.1159**	**4.1000e-003**	**0.1200**		**709.1311**	**709.1311**	**0.0330**		**709.9569**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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
Vendor	0.0336	1.2537	0.2359	3.5100e-003	0.0833	2.1500e-003	0.0854	0.0240	2.0600e-003	0.0260		369.9661	369.9661	0.0234		370.5506
Worker	0.1575	0.0974	1.2834	3.4100e-003	0.3465	2.2200e-003	0.3487	0.0919	2.0400e-003	0.0939		339.1650	339.1650	9.6500e-003		339.4063
Total	**0.1912**	**1.3511**	**1.5193**	**6.9200e-003**	**0.4298**	**4.3700e-003**	**0.4341**	**0.1159**	**4.1000e-003**	**0.1200**		**709.1311**	**709.1311**	**0.0330**		**709.9569**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9949**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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
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
Worker	0.0712	0.0424	0.5705	1.5900e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		158.1904	158.1904	4.1900e-003		158.2951
Total	**0.0712**	**0.0424**	**0.5705**	**1.5900e-003**	**0.1677**	**1.0400e-003**	**0.1687**	**0.0445**	**9.6000e-004**	**0.0454**		**158.1904**	**158.1904**	**4.1900e-003**		**158.2951**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9949**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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
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
Worker	0.0712	0.0424	0.5705	1.5900e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		158.1904	158.1904	4.1900e-003		158.2951
Total	**0.0712**	**0.0424**	**0.5705**	**1.5900e-003**	**0.1677**	**1.0400e-003**	**0.1687**	**0.0445**	**9.6000e-004**	**0.0454**		**158.1904**	**158.1904**	**4.1900e-003**		**158.2951**

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	9.0872					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	**9.2917**	**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
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
Worker	0.0285	0.0169	0.2282	6.4000e-004	0.0671	4.2000e-004	0.0675	0.0178	3.8000e-004	0.0182		63.2762	63.2762	1.6800e-003		63.3180
Total	**0.0285**	**0.0169**	**0.2282**	**6.4000e-004**	**0.0671**	**4.2000e-004**	**0.0675**	**0.0178**	**3.8000e-004**	**0.0182**		**63.2762**	**63.2762**	**1.6800e-003**		**63.3180**

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	9.0872					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	**9.2917**	**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
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
Worker	0.0285	0.0169	0.2282	6.4000e-004	0.0671	4.2000e-004	0.0675	0.0178	3.8000e-004	0.0182		63.2762	63.2762	1.6800e-003		63.3180
Total	**0.0285**	**0.0169**	**0.2282**	**6.4000e-004**	**0.0671**	**4.2000e-004**	**0.0675**	**0.0178**	**3.8000e-004**	**0.0182**		**63.2762**	**63.2762**	**1.6800e-003**		**63.3180**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	11.1303	61.9130	53.1189	0.1719	7.3959	0.1123	7.5083	1.9792	0.1050	2.0842		17,693.8252	17,693.8252	1.7507		17,737.5922
Unmitigated	11.4124	64.1895	60.9358	0.2023	9.8627	0.1340	9.9967	2.6393	0.1253	2.7646		20,788.1901	20,788.1901	1.8569		20,834.6124

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
Gasoline/Service Station	7,152.00	7,152.00	7152.00	4,625,834	3,468,845
Parking Lot	0.00	0.00	0.00		
Total	7,152.00	7,152.00	7,152.00	4,625,834	3,468,845

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
Convenience Market (24 Hour)	16.60	8.40	6.90	0.90	80.10	19.00	24	15	61
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	16.60	8.40	6.90	2.00	79.00	19.00	14	27	59
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
Convenience Market (24 Hour)	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Fast Food Restaurant with Drive Thru	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Gasoline/Service Station	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0495	0.4504	0.3783	2.7000e-003		0.0342	0.0342		0.0342	0.0342		540.4453	540.4453	0.0104	9.9100e-003	543.6569
NaturalGas Unmitigated	0.0495	0.4504	0.3783	2.7000e-003		0.0342	0.0342		0.0342	0.0342		540.4453	540.4453	0.0104	9.9100e-003	543.6569

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					
Convenience Market (24 Hour)	60.2137	6.5000e-004	5.9000e-003	4.9600e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004		7.0840	7.0840	1.4000e-004	1.3000e-004	7.1261
Fast Food Restaurant with Drive Thru	4345.07	0.0469	0.4260	0.3578	2.5600e-003		0.0324	0.0324		0.0324	0.0324		511.1852	511.1852	9.8000e-003	9.3700e-003	514.2229
Gasoline/Service Station	188.497	2.0300e-003	0.0185	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003		22.1761	22.1761	4.3000e-004	4.1000e-004	22.3079
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		**0.0495**	**0.4504**	**0.3783**	**2.7100e-003**		**0.0342**	**0.0342**		**0.0342**	**0.0342**		**540.4453**	**540.4453**	**0.0104**	**9.9100e-003**	**543.6569**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Convenience Market (24 Hour)	0.0602137	6.5000e-004	5.9000e-003	4.9600e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004		7.0840	7.0840	1.4000e-004	1.3000e-004	7.1261
Fast Food Restaurant with Drive Thru	4.34507	0.0469	0.4260	0.3578	2.5600e-003		0.0324	0.0324		0.0324	0.0324		511.1852	511.1852	9.8000e-003	9.3700e-003	514.2229
Gasoline/Service Station	0.188497	2.0300e-003	0.0185	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003		22.1761	22.1761	4.3000e-004	4.1000e-004	22.3079
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		**0.0495**	**0.4504**	**0.3783**	**2.7100e-003**		**0.0342**	**0.0342**		**0.0342**	**0.0342**		**540.4453**	**540.4453**	**0.0104**	**9.9100e-003**	**543.6569**

6.0 Area Detail

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	0.4254	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419
Unmitigated	0.4254	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7200e-003	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419
Total	**0.4254**	**1.7000e-004**	**0.0184**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0393**	**0.0393**	**1.0000e-004**		**0.0419**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7200e-003	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419
Total	**0.4254**	**1.7000e-004**	**0.0184**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0393**	**0.0393**	**1.0000e-004**		**0.0419**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Bloomington Commercial Center

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	149.00	Space	6.81	59,600.00	0
Fast Food Restaurant with Drive Thru	5.80	1000sqft	0.66	5,800.00	0
Convenience Market (24 Hour)	9.90	1000sqft	1.17	9,900.00	0
Gasoline/Service Station	15.00	Pump	0.25	2,117.62	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	507	**CH4 Intensity (lb/MWhr)**	0.021	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SCE Intensity Factors reduced by 27.8% per Edison International 2018 Sustainability Report

Land Use - Total Project site 8.9 acres

Construction Phase - Construction schedule provided by applicant

Trips and VMT - 6 Vendor Trucks/Day added to Site Preparation and Grading Phases to account for Water Truck Emissions

Vehicle Trips - Daily Trip Rate from TIA

Energy Use -

Construction Off-road Equipment Mitigation - Water Exposed Area 2x per day selected to account for SCAQMD Rule 403 Minimum Requirements

Mobile Land Use Mitigation - Improve Pedestrian Network Onsite; Increase Transit Accesibility 0.01 mile to Omnitrans Bus 29 Stop on project site.

Energy Mitigation - Per 2019 Title 24 requirements a 30% improvement to lighting was selected

Water Mitigation - Install low-flow fixtures and water-efficient irrigation

Waste Mitigation - 50% reduction in solid waste selected to account for AB 341

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	2/24/2022	2/25/2022
tblConstructionPhase	PhaseEndDate	1/27/2022	1/28/2022
tblConstructionPhase	PhaseStartDate	1/28/2022	1/29/2022
tblConstructionPhase	PhaseStartDate	12/31/2021	1/1/2022
tblLandUse	LotAcreage	1.34	6.81
tblLandUse	LotAcreage	0.13	0.66
tblLandUse	LotAcreage	0.23	1.17
tblLandUse	LotAcreage	0.05	0.25
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	702.44	507
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblVehicleTrips	ST_TR	863.10	0.00
tblVehicleTrips	ST_TR	722.03	0.00
tblVehicleTrips	ST_TR	168.56	476.80
tblVehicleTrips	SU_TR	758.45	0.00
tblVehicleTrips	SU_TR	542.72	0.00
tblVehicleTrips	SU_TR	168.56	476.80
tblVehicleTrips	WD_TR	737.99	0.00
tblVehicleTrips	WD_TR	496.12	0.00
tblVehicleTrips	WD_TR	168.56	476.80

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9963	41.1290	21.8928	0.0414	18.3059	2.0468	20.3527	9.9951	1.8831	11.8782	0.0000	4,026.4475	4,026.4475	1.2089	0.0000	4,056.6699
2022	9.3203	11.1694	15.0476	0.0242	0.1677	0.5689	0.7366	0.0445	0.5234	0.5679	0.0000	2,349.5822	2,349.5822	0.7177	0.0000	2,367.5242
Maximum	**9.3203**	**41.1290**	**21.8928**	**0.0414**	**18.3059**	**2.0468**	**20.3527**	**9.9951**	**1.8831**	**11.8782**	**0.0000**	**4,026.4475**	**4,026.4475**	**1.2089**	**0.0000**	**4,056.6699**

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					
2021	3.9963	41.1290	21.8928	0.0414	8.3695	2.0468	10.4162	4.5332	1.8831	6.4163	0.0000	4,026.4475	4,026.4475	1.2089	0.0000	4,056.6699
2022	9.3203	11.1694	15.0476	0.0242	0.1677	0.5689	0.7366	0.0445	0.5234	0.5679	0.0000	2,349.5822	2,349.5822	0.7177	0.0000	2,367.5242
Maximum	**9.3203**	**41.1290**	**21.8928**	**0.0414**	**8.3695**	**2.0468**	**10.4162**	**4.5332**	**1.8831**	**6.4163**	**0.0000**	**4,026.4475**	**4,026.4475**	**1.2089**	**0.0000**	**4,056.6699**

	ROG	NOx	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**	**53.79**	**0.00**	**47.12**	**54.40**	**0.00**	**43.88**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	0.4254	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419
Energy	0.0495	0.4504	0.3783	2.7000e-003		0.0342	0.0342		0.0342	0.0342		540.4453	540.4453	0.0104	9.9100e-003	543.6569

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	0.4254	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419
Energy	0.0495	0.4504	0.3783	2.7000e-003		0.0342	0.0342		0.0342	0.0342		540.4453	540.4453	0.0104	9.9100e-003	543.6569

	ROG	NOx	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	2.62	3.78	10.22	15.09	25.01	12.56	24.80	25.01	12.43	24.28	0.00	14.75	14.75	4.88	0.00	14.72

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	1/1/2021	1/14/2021	5	10	
2	Grading	Grading	1/15/2021	2/11/2021	5	20	
3	Building Construction	Building Construction	2/12/2021	12/30/2021	5	230	
4	Paving	Paving	1/1/2022	1/28/2022	5	20	
5	Architectural Coating	Architectural Coating	1/29/2022	2/25/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 6.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 26,726; Non-Residential Outdoor: 8,909; Striped Parking Area: 3,576 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	31.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2021

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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
Vendor	0.0165	0.5725	0.1274	1.5600e-003	0.0384	1.0200e-003	0.0395	0.0111	9.8000e-004	0.0120		164.1211	164.1211	0.0120		164.4201
Worker	0.0917	0.0595	0.6112	1.7700e-003	0.2012	1.2900e-003	0.2025	0.0534	1.1900e-003	0.0545		176.6696	176.6696	4.9200e-003		176.7925
Total	**0.1081**	**0.6319**	**0.7386**	**3.3300e-003**	**0.2396**	**2.3100e-003**	**0.2419**	**0.0644**	**2.1700e-003**	**0.0666**		**340.7907**	**340.7907**	**0.0169**		**341.2126**

3.2 Site Preparation - 2021

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**8.1298**	**2.0445**	**10.1743**	**4.4688**	**1.8809**	**6.3497**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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
Vendor	0.0165	0.5725	0.1274	1.5600e-003	0.0384	1.0200e-003	0.0395	0.0111	9.8000e-004	0.0120		164.1211	164.1211	0.0120		164.4201
Worker	0.0917	0.0595	0.6112	1.7700e-003	0.2012	1.2900e-003	0.2025	0.0534	1.1900e-003	0.0545		176.6696	176.6696	4.9200e-003		176.7925
Total	**0.1081**	**0.6319**	**0.7386**	**3.3300e-003**	**0.2396**	**2.3100e-003**	**0.2419**	**0.0644**	**2.1700e-003**	**0.0666**		**340.7907**	**340.7907**	**0.0169**		**341.2126**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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
Vendor	0.0165	0.5725	0.1274	1.5600e-003	0.0384	1.0200e-003	0.0395	0.0111	9.8000e-004	0.0120		164.1211	164.1211	0.0120		164.4201
Worker	0.0764	0.0496	0.5093	1.4800e-003	0.1677	1.0700e-003	0.1687	0.0445	9.9000e-004	0.0455		147.2247	147.2247	4.1000e-003		147.3271
Total	**0.0929**	**0.6220**	**0.6367**	**3.0400e-003**	**0.2061**	**2.0900e-003**	**0.2082**	**0.0555**	**1.9700e-003**	**0.0575**		**311.3457**	**311.3457**	**0.0161**		**311.7472**

3.3 Grading - 2021

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**2.9486**	**1.1599**	**4.1085**	**1.5154**	**1.0671**	**2.5825**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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
Vendor	0.0165	0.5725	0.1274	1.5600e-003	0.0384	1.0200e-003	0.0395	0.0111	9.8000e-004	0.0120		164.1211	164.1211	0.0120		164.4201
Worker	0.0764	0.0496	0.5093	1.4800e-003	0.1677	1.0700e-003	0.1687	0.0445	9.9000e-004	0.0455		147.2247	147.2247	4.1000e-003		147.3271
Total	**0.0929**	**0.6220**	**0.6367**	**3.0400e-003**	**0.2061**	**2.0900e-003**	**0.2082**	**0.0555**	**1.9700e-003**	**0.0575**		**311.3457**	**311.3457**	**0.0161**		**311.7472**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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
Vendor	0.0357	1.2403	0.2759	3.3700e-003	0.0833	2.2100e-003	0.0855	0.0240	2.1100e-003	0.0261		355.5957	355.5957	0.0259		356.2435
Worker	0.1579	0.1024	1.0526	3.0500e-003	0.3465	2.2200e-003	0.3487	0.0919	2.0400e-003	0.0939		304.2643	304.2643	8.4700e-003		304.4760
Total	**0.1935**	**1.3427**	**1.3286**	**6.4200e-003**	**0.4298**	**4.4300e-003**	**0.4342**	**0.1159**	**4.1500e-003**	**0.1200**		**659.8600**	**659.8600**	**0.0344**		**660.7195**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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
Vendor	0.0357	1.2403	0.2759	3.3700e-003	0.0833	2.2100e-003	0.0855	0.0240	2.1100e-003	0.0261		355.5957	355.5957	0.0259		356.2435
Worker	0.1579	0.1024	1.0526	3.0500e-003	0.3465	2.2200e-003	0.3487	0.0919	2.0400e-003	0.0939		304.2643	304.2643	8.4700e-003		304.4760
Total	**0.1935**	**1.3427**	**1.3286**	**6.4200e-003**	**0.4298**	**4.4300e-003**	**0.4342**	**0.1159**	**4.1500e-003**	**0.1200**		**659.8600**	**659.8600**	**0.0344**		**660.7195**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9949**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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
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
Worker	0.0715	0.0445	0.4671	1.4200e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		141.9219	141.9219	3.6800e-003		142.0139
Total	**0.0715**	**0.0445**	**0.4671**	**1.4200e-003**	**0.1677**	**1.0400e-003**	**0.1687**	**0.0445**	**9.6000e-004**	**0.0454**		**141.9219**	**141.9219**	**3.6800e-003**		**142.0139**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.8921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.9949**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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
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
Worker	0.0715	0.0445	0.4671	1.4200e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		141.9219	141.9219	3.6800e-003		142.0139
Total	**0.0715**	**0.0445**	**0.4671**	**1.4200e-003**	**0.1677**	**1.0400e-003**	**0.1687**	**0.0445**	**9.6000e-004**	**0.0454**		**141.9219**	**141.9219**	**3.6800e-003**		**142.0139**

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	9.0872					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	**9.2917**	**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
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
Worker	0.0286	0.0178	0.1869	5.7000e-004	0.0671	4.2000e-004	0.0675	0.0178	3.8000e-004	0.0182		56.7688	56.7688	1.4700e-003		56.8055
Total	**0.0286**	**0.0178**	**0.1869**	**5.7000e-004**	**0.0671**	**4.2000e-004**	**0.0675**	**0.0178**	**3.8000e-004**	**0.0182**		**56.7688**	**56.7688**	**1.4700e-003**		**56.8055**

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	9.0872					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	**9.2917**	**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
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
Worker	0.0286	0.0178	0.1869	5.7000e-004	0.0671	4.2000e-004	0.0675	0.0178	3.8000e-004	0.0182		56.7688	56.7688	1.4700e-003		56.8055
Total	**0.0286**	**0.0178**	**0.1869**	**5.7000e-004**	**0.0671**	**4.2000e-004**	**0.0675**	**0.0178**	**3.8000e-004**	**0.0182**		**56.7688**	**56.7688**	**1.4700e-003**		**56.8055**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	9.3956	60.2575	55.4161	0.1559	7.3959	0.1164	7.5123	1.9792	0.1089	2.0881		16,043.1954	16,043.1954	1.9256		16,091.3341
Unmitigated	9.6610	62.6455	61.7717	0.1841	9.8627	0.1381	10.0008	2.6393	0.1292	2.7685		18,913.0798	18,913.0798	2.0248		18,963.6990

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
Gasoline/Service Station	7,152.00	7,152.00	7152.00	4,625,834	3,468,845
Parking Lot	0.00	0.00	0.00		
Total	7,152.00	7,152.00	7,152.00	4,625,834	3,468,845

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
Convenience Market (24 Hour)	16.60	8.40	6.90	0.90	80.10	19.00	24	15	61
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	16.60	8.40	6.90	2.00	79.00	19.00	14	27	59
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
Convenience Market (24 Hour)	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Fast Food Restaurant with Drive Thru	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Gasoline/Service Station	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0495	0.4504	0.3783	2.7000e-003		0.0342	0.0342		0.0342	0.0342		540.4453	540.4453	0.0104	9.9100e-003	543.6569
NaturalGas Unmitigated	0.0495	0.4504	0.3783	2.7000e-003		0.0342	0.0342		0.0342	0.0342		540.4453	540.4453	0.0104	9.9100e-003	543.6569

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					
Convenience Market (24 Hour)	60.2137	6.5000e-004	5.9000e-003	4.9600e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004		7.0840	7.0840	1.4000e-004	1.3000e-004	7.1261
Fast Food Restaurant with Drive Thru	4345.07	0.0469	0.4260	0.3578	2.5600e-003		0.0324	0.0324		0.0324	0.0324		511.1852	511.1852	9.8000e-003	9.3700e-003	514.2229
Gasoline/Service Station	188.497	2.0300e-003	0.0185	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003		22.1761	22.1761	4.3000e-004	4.1000e-004	22.3079
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		**0.0495**	**0.4504**	**0.3783**	**2.7100e-003**		**0.0342**	**0.0342**		**0.0342**	**0.0342**		**540.4453**	**540.4453**	**0.0104**	**9.9100e-003**	**543.6569**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Convenience Market (24 Hour)	0.0602137	6.5000e-004	5.9000e-003	4.9600e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004		7.0840	7.0840	1.4000e-004	1.3000e-004	7.1261
Fast Food Restaurant with Drive Thru	4.34507	0.0469	0.4260	0.3578	2.5600e-003		0.0324	0.0324		0.0324	0.0324		511.1852	511.1852	9.8000e-003	9.3700e-003	514.2229
Gasoline/Service Station	0.188497	2.0300e-003	0.0185	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003		22.1761	22.1761	4.3000e-004	4.1000e-004	22.3079
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		**0.0495**	**0.4504**	**0.3783**	**2.7100e-003**		**0.0342**	**0.0342**		**0.0342**	**0.0342**		**540.4453**	**540.4453**	**0.0104**	**9.9100e-003**	**543.6569**

6.0 Area Detail

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	0.4254	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419
Unmitigated	0.4254	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7200e-003	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419
Total	**0.4254**	**1.7000e-004**	**0.0184**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0393**	**0.0393**	**1.0000e-004**		**0.0419**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7200e-003	1.7000e-004	0.0184	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0393	0.0393	1.0000e-004		0.0419
Total	**0.4254**	**1.7000e-004**	**0.0184**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0393**	**0.0393**	**1.0000e-004**		**0.0419**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Bloomington Commercial Center

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	149.00	Space	6.81	59,600.00	0
Fast Food Restaurant with Drive Thru	5.80	1000sqft	0.66	5,800.00	0
Convenience Market (24 Hour)	9.90	1000sqft	1.17	9,900.00	0
Gasoline/Service Station	15.00	Pump	0.25	2,117.62	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	507	**CH4 Intensity (lb/MWhr)**	0.021	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - SCE Intensity Factors reduced by 27.8% per Edison International 2018 Sustainability Report

Land Use - Total Project site 8.9 acres

Construction Phase - Construction schedule provided by applicant

Trips and VMT - 6 Vendor Trucks/Day added to Site Preparation and Grading Phases to account for Water Truck Emissions

Vehicle Trips - Daily Trip Rate from TIA

Energy Use -

Construction Off-road Equipment Mitigation - Water Exposed Area 2x per day selected to account for SCAQMD Rule 403 Minimum Requirements

Mobile Land Use Mitigation - Improve Pedestrian Network Onsite; Increase Transit Accesibility 0.01 mile to Omnitrans Bus 29 Stop on project site.

Energy Mitigation - Per 2019 Title 24 requirements a 30% improvement to lighting was selected

Water Mitigation - Install low-flow fixtures and water-efficient irrigation

Waste Mitigation - 50% reduction in solid waste selected to account for AB 341

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	2/24/2022	2/25/2022
tblConstructionPhase	PhaseEndDate	1/27/2022	1/28/2022
tblConstructionPhase	PhaseStartDate	1/28/2022	1/29/2022
tblConstructionPhase	PhaseStartDate	12/31/2021	1/1/2022
tblLandUse	LotAcreage	1.34	6.81
tblLandUse	LotAcreage	0.13	0.66
tblLandUse	LotAcreage	0.23	1.17
tblLandUse	LotAcreage	0.05	0.25
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	702.44	507
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblVehicleTrips	ST_TR	863.10	0.00
tblVehicleTrips	ST_TR	722.03	0.00
tblVehicleTrips	ST_TR	168.56	476.80
tblVehicleTrips	SU_TR	758.45	0.00
tblVehicleTrips	SU_TR	542.72	0.00
tblVehicleTrips	SU_TR	168.56	476.80
tblVehicleTrips	WD_TR	737.99	0.00
tblVehicleTrips	WD_TR	496.12	0.00
tblVehicleTrips	WD_TR	168.56	476.80

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2827	2.6220	2.3374	4.3900e-003	0.2076	0.1326	0.3402	0.0973	0.1242	0.2215	0.0000	384.0293	384.0293	0.0818	0.0000	386.0738
2022	0.1138	0.1260	0.1708	2.8000e-004	2.3000e-003	6.5100e-003	8.8100e-003	6.1000e-004	6.0600e-003	6.6700e-003	0.0000	24.4228	24.4228	6.6900e-003	0.0000	24.5900
Maximum	**0.2827**	**2.6220**	**2.3374**	**4.3900e-003**	**0.2076**	**0.1326**	**0.3402**	**0.0973**	**0.1242**	**0.2215**	**0.0000**	**384.0293**	**384.0293**	**0.0818**	**0.0000**	**386.0738**

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					
2021	0.2827	2.6220	2.3374	4.3900e-003	0.1219	0.1326	0.2545	0.0515	0.1242	0.1757	0.0000	384.0290	384.0290	0.0818	0.0000	386.0735
2022	0.1138	0.1260	0.1708	2.8000e-004	2.3000e-003	6.5100e-003	8.8100e-003	6.1000e-004	6.0600e-003	6.6700e-003	0.0000	24.4227	24.4227	6.6900e-003	0.0000	24.5900
Maximum	**0.2827**	**2.6220**	**2.3374**	**4.3900e-003**	**0.1219**	**0.1326**	**0.2545**	**0.0515**	**0.1242**	**0.1757**	**0.0000**	**384.0290**	**384.0290**	**0.0818**	**0.0000**	**386.0735**

	ROG	NOx	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**	**40.84**	**0.00**	**24.56**	**46.81**	**0.00**	**20.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.8608	0.8608
2	4-1-2021	6-30-2021	0.6784	0.6784
3	7-1-2021	9-30-2021	0.6859	0.6859
4	10-1-2021	12-31-2021	0.6783	0.6783
5	1-1-2022	3-31-2022	0.2398	0.2398
		Highest	0.8608	0.8608

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	0.0775	2.0000e-005	2.3000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.4600e-003	4.4600e-003	1.0000e-005	0.0000	4.7600e-003
Energy	9.0400e-003	0.0822	0.0690	4.9000e-004		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	191.3023	191.3023	5.9300e-003	2.4400e-003	192.1789
Mobile	1.6861	11.6642	11.3152	0.0348	1.7615	0.0247	1.7862	0.4721	0.0231	0.4952	0.0000	3,240.7019	3,240.7019	0.3194	0.0000	3,248.6861
Waste						0.0000	0.0000		0.0000	0.0000	21.2410	0.0000	21.2410	1.2553	0.0000	52.6236
Water						0.0000	0.0000		0.0000	0.0000	0.8544	9.8116	10.6660	0.0882	2.1500e-003	13.5105
Total	**1.7727**	**11.7464**	**11.3865**	**0.0353**	**1.7615**	**0.0309**	**1.7924**	**0.4721**	**0.0293**	**0.5015**	**22.0954**	**3,441.8203**	**3,463.9157**	**1.6688**	**4.5900e-003**	**3,507.0039**

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	0.0775	2.0000e-005	2.3000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.4600e-003	4.4600e-003	1.0000e-005	0.0000	4.7600e-003
Energy	9.0400e-003	0.0822	0.0690	4.9000e-004		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	182.9544	182.9544	5.5900e-003	2.3800e-003	183.8027
Mobile	1.6369	11.2191	10.1024	0.0296	1.3209	0.0207	1.3417	0.3540	0.0194	0.3734	0.0000	2,760.3684	2,760.3684	0.3028	0.0000	2,767.9376
Waste						0.0000	0.0000		0.0000	0.0000	10.6205	0.0000	10.6205	0.6277	0.0000	26.3118
Water						0.0000	0.0000		0.0000	0.0000	0.6835	8.0922	8.7757	0.0705	1.7200e-003	11.0521
Total	**1.7235**	**11.3013**	**10.1737**	**0.0300**	**1.3209**	**0.0270**	**1.3479**	**0.3540**	**0.0257**	**0.3797**	**11.3040**	**2,951.4194**	**2,962.7234**	**1.0066**	**4.1000e-003**	**2,989.1089**

	ROG	NOx	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	**2.78**	**3.79**	**10.65**	**14.78**	**25.01**	**12.74**	**24.80**	**25.01**	**12.58**	**24.28**	**48.84**	**14.25**	**14.47**	**39.68**	**10.68**	**14.77**

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	1/1/2021	1/14/2021	5	10	
2	Grading	Grading	1/15/2021	2/11/2021	5	20	
3	Building Construction	Building Construction	2/12/2021	12/30/2021	5	230	
4	Paving	Paving	1/1/2022	1/28/2022	5	20	
5	Architectural Coating	Architectural Coating	1/29/2022	2/25/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 6.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 26,726; Non-Residential Outdoor: 8,909; Striped Parking Area: 3,576 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	31.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0903**	**0.0102**	**0.1006**	**0.0497**	**9.4000e-003**	**0.0591**	**0.0000**	**16.7179**	**16.7179**	**5.4100e-003**	**0.0000**	**16.8530**

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	8.0000e-005	2.9200e-003	5.9000e-004	1.0000e-005	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.7619	0.7619	5.0000e-005	0.0000	0.7632
Worker	4.1000e-004	3.1000e-004	3.2100e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8189	0.8189	2.0000e-005	0.0000	0.8195
Total	**4.9000e-004**	**3.2300e-003**	**3.8000e-003**	**2.0000e-005**	**1.1800e-003**	**2.0000e-005**	**1.1800e-003**	**3.1000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.5808**	**1.5808**	**7.0000e-005**	**0.0000**	**1.5827**

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0407**	**0.0102**	**0.0509**	**0.0223**	**9.4000e-003**	**0.0317**	**0.0000**	**16.7178**	**16.7178**	**5.4100e-003**	**0.0000**	**16.8530**

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	8.0000e-005	2.9200e-003	5.9000e-004	1.0000e-005	1.9000e-004	1.0000e-005	1.9000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.7619	0.7619	5.0000e-005	0.0000	0.7632
Worker	4.1000e-004	3.1000e-004	3.2100e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8189	0.8189	2.0000e-005	0.0000	0.8195
Total	**4.9000e-004**	**3.2300e-003**	**3.8000e-003**	**2.0000e-005**	**1.1800e-003**	**2.0000e-005**	**1.1800e-003**	**3.1000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.5808**	**1.5808**	**7.0000e-005**	**0.0000**	**1.5827**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644
Total	**0.0229**	**0.2474**	**0.1586**	**3.0000e-004**	**0.0655**	**0.0116**	**0.0771**	**0.0337**	**0.0107**	**0.0443**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2644**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.8400e-003	1.1900e-003	2.0000e-005	3.8000e-004	1.0000e-005	3.9000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.5238	1.5238	1.0000e-004	0.0000	1.5264
Worker	6.9000e-004	5.2000e-004	5.3400e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3649	1.3649	4.0000e-005	0.0000	1.3658
Total	**8.5000e-004**	**6.3600e-003**	**6.5300e-003**	**4.0000e-005**	**2.0200e-003**	**2.0000e-005**	**2.0500e-003**	**5.5000e-004**	**2.0000e-005**	**5.7000e-004**	**0.0000**	**2.8886**	**2.8886**	**1.4000e-004**	**0.0000**	**2.8922**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643
Total	**0.0229**	**0.2474**	**0.1586**	**3.0000e-004**	**0.0295**	**0.0116**	**0.0411**	**0.0152**	**0.0107**	**0.0258**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2643**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.8400e-003	1.1900e-003	2.0000e-005	3.8000e-004	1.0000e-005	3.9000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.5238	1.5238	1.0000e-004	0.0000	1.5264
Worker	6.9000e-004	5.2000e-004	5.3400e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3649	1.3649	4.0000e-005	0.0000	1.3658
Total	**8.5000e-004**	**6.3600e-003**	**6.5300e-003**	**4.0000e-005**	**2.0200e-003**	**2.0000e-005**	**2.0500e-003**	**5.5000e-004**	**2.0000e-005**	**5.7000e-004**	**0.0000**	**2.8886**	**2.8886**	**1.4000e-004**	**0.0000**	**2.8922**

3.4 Building Construction - 2021

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	0.2186	2.0047	1.9062	3.1000e-003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3829	266.3829	0.0643	0.0000	267.9895
Total	**0.2186**	**2.0047**	**1.9062**	**3.1000e-003**		**0.1102**	**0.1102**		**0.1037**	**0.1037**	**0.0000**	**266.3829**	**266.3829**	**0.0643**	**0.0000**	**267.9895**

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	3.9600e-003	0.1454	0.0296	4.0000e-004	9.4300e-003	2.5000e-004	9.6800e-003	2.7200e-003	2.4000e-004	2.9600e-003	0.0000	37.9675	37.9675	2.5600e-003	0.0000	38.0315
Worker	0.0164	0.0124	0.1270	3.6000e-004	0.0391	2.5000e-004	0.0393	0.0104	2.3000e-004	0.0106	0.0000	32.4380	32.4380	9.1000e-004	0.0000	32.4607
Total	**0.0204**	**0.1578**	**0.1566**	**7.6000e-004**	**0.0485**	**5.0000e-004**	**0.0490**	**0.0131**	**4.7000e-004**	**0.0136**	**0.0000**	**70.4055**	**70.4055**	**3.4700e-003**	**0.0000**	**70.4921**

3.4 Building Construction - 2021

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	0.2186	2.0047	1.9062	3.1000e-003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3826	266.3826	0.0643	0.0000	267.9892
Total	**0.2186**	**2.0047**	**1.9062**	**3.1000e-003**		**0.1102**	**0.1102**		**0.1037**	**0.1037**	**0.0000**	**266.3826**	**266.3826**	**0.0643**	**0.0000**	**267.9892**

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	3.9600e-003	0.1454	0.0296	4.0000e-004	9.4300e-003	2.5000e-004	9.6800e-003	2.7200e-003	2.4000e-004	2.9600e-003	0.0000	37.9675	37.9675	2.5600e-003	0.0000	38.0315
Worker	0.0164	0.0124	0.1270	3.6000e-004	0.0391	2.5000e-004	0.0393	0.0104	2.3000e-004	0.0106	0.0000	32.4380	32.4380	9.1000e-004	0.0000	32.4607
Total	**0.0204**	**0.1578**	**0.1566**	**7.6000e-004**	**0.0485**	**5.0000e-004**	**0.0490**	**0.0131**	**4.7000e-004**	**0.0136**	**0.0000**	**70.4055**	**70.4055**	**3.4700e-003**	**0.0000**	**70.4921**

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	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	8.9200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0200**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0276**	**20.0276**	**6.4800e-003**	**0.0000**	**20.1895**

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	6.5000e-004	4.7000e-004	4.9000e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3157	1.3157	3.0000e-005	0.0000	1.3165
Total	**6.5000e-004**	**4.7000e-004**	**4.9000e-003**	**1.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3157**	**1.3157**	**3.0000e-005**	**0.0000**	**1.3165**

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	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	8.9200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0200**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0275**	**20.0275**	**6.4800e-003**	**0.0000**	**20.1895**

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	6.5000e-004	4.7000e-004	4.9000e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3157	1.3157	3.0000e-005	0.0000	1.3165
Total	**6.5000e-004**	**4.7000e-004**	**4.9000e-003**	**1.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3157**	**1.3157**	**3.0000e-005**	**0.0000**	**1.3165**

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	0.0909					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.0929**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	1.9600e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5263	0.5263	1.0000e-005	0.0000	0.5266
Total	**2.6000e-004**	**1.9000e-004**	**1.9600e-003**	**1.0000e-005**	**6.6000e-004**	**0.0000**	**6.6000e-004**	**1.7000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.5263**	**0.5263**	**1.0000e-005**	**0.0000**	**0.5266**

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	tons/yr										MT/yr					
Archit. Coating	0.0909					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.0929**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.9000e-004	1.9600e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5263	0.5263	1.0000e-005	0.0000	0.5266
Total	**2.6000e-004**	**1.9000e-004**	**1.9600e-003**	**1.0000e-005**	**6.6000e-004**	**0.0000**	**6.6000e-004**	**1.7000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.5263**	**0.5263**	**1.0000e-005**	**0.0000**	**0.5266**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6369	11.2191	10.1024	0.0296	1.3209	0.0207	1.3417	0.3540	0.0194	0.3734	0.0000	2,760.3684	2,760.3684	0.3028	0.0000	2,767.9376
Unmitigated	1.6861	11.6642	11.3152	0.0348	1.7615	0.0247	1.7862	0.4721	0.0231	0.4952	0.0000	3,240.7019	3,240.7019	0.3194	0.0000	3,248.6861

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
Gasoline/Service Station	7,152.00	7,152.00	7152.00	4,625,834	3,468,845
Parking Lot	0.00	0.00	0.00		
Total	7,152.00	7,152.00	7,152.00	4,625,834	3,468,845

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
Convenience Market (24 Hour)	16.60	8.40	6.90	0.90	80.10	19.00	24	15	61
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	16.60	8.40	6.90	2.00	79.00	19.00	14	27	59
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
Convenience Market (24 Hour)	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Fast Food Restaurant with Drive Thru	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Gasoline/Service Station	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	93.4776	93.4776	3.8700e-003	7.4000e-004	93.7942
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	101.8255	101.8255	4.2200e-003	8.0000e-004	102.1704
NaturalGas Mitigated	9.0400e-003	0.0822	0.0690	4.9000e-004		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	89.4768	89.4768	1.7100e-003	1.6400e-003	90.0085
NaturalGas Unmitigated	9.0400e-003	0.0822	0.0690	4.9000e-004		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	89.4768	89.4768	1.7100e-003	1.6400e-003	90.0085

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					
Convenience Market (24 Hour)	21978	1.2000e-004	1.0800e-003	9.0000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1728	1.1728	2.0000e-005	2.0000e-005	1.1798
Fast Food Restaurant with Drive Thru	1.58595e+006	8.5500e-003	0.0777	0.0653	4.7000e-004		5.9100e-003	5.9100e-003		5.9100e-003	5.9100e-003	0.0000	84.6324	84.6324	1.6200e-003	1.5500e-003	85.1354
Gasoline/Service Station	68801.5	3.7000e-004	3.3700e-003	2.8300e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.6715	3.6715	7.0000e-005	7.0000e-005	3.6933
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		**9.0400e-003**	**0.0822**	**0.0690**	**5.0000e-004**		**6.2500e-003**	**6.2500e-003**		**6.2500e-003**	**6.2500e-003**	**0.0000**	**89.4768**	**89.4768**	**1.7100e-003**	**1.6400e-003**	**90.0085**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Convenience Market (24 Hour)	21978	1.2000e-004	1.0800e-003	9.0000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1728	1.1728	2.0000e-005	2.0000e-005	1.1798
Fast Food Restaurant with Drive Thru	1.58595e+006	8.5500e-003	0.0777	0.0653	4.7000e-004		5.9100e-003	5.9100e-003		5.9100e-003	5.9100e-003	0.0000	84.6324	84.6324	1.6200e-003	1.5500e-003	85.1354
Gasoline/Service Station	68801.5	3.7000e-004	3.3700e-003	2.8300e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.6715	3.6715	7.0000e-005	7.0000e-005	3.6933
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		**9.0400e-003**	**0.0822**	**0.0690**	**5.0000e-004**		**6.2500e-003**	**6.2500e-003**		**6.2500e-003**	**6.2500e-003**	**0.0000**	**89.4768**	**89.4768**	**1.7100e-003**	**1.6400e-003**	**90.0085**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market (24 Hour)	125037	28.7549	1.1900e-003	2.3000e-004	28.8523
Fast Food Restaurant with Drive Thru	275384	63.3304	2.6200e-003	5.0000e-004	63.5449
Gasoline/Service Station	21493.8	4.9430	2.0000e-004	4.0000e-005	4.9597
Parking Lot	20860	4.7972	2.0000e-004	4.0000e-005	4.8135
Total		**101.8255**	**4.2100e-003**	**8.1000e-004**	**102.1704**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market (24 Hour)	108375	24.9232	1.0300e-003	2.0000e-004	25.0076
Fast Food Restaurant with Drive Thru	263865	60.6814	2.5100e-003	4.8000e-004	60.8869
Gasoline/Service Station	19632.5	4.5149	1.9000e-004	4.0000e-005	4.5302
Parking Lot	14602	3.3580	1.4000e-004	3.0000e-005	3.3694
Total		**93.4776**	**3.8700e-003**	**7.5000e-004**	**93.7942**

6.0 Area Detail

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	0.0775	2.0000e-005	2.3000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.4600e-003	4.4600e-003	1.0000e-005	0.0000	4.7600e-003
Unmitigated	0.0775	2.0000e-005	2.3000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.4600e-003	4.4600e-003	1.0000e-005	0.0000	4.7600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	9.0900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0682					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.3000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.4600e-003	4.4600e-003	1.0000e-005	0.0000	4.7600e-003
Total	**0.0776**	**2.0000e-005**	**2.3000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.4600e-003**	**4.4600e-003**	**1.0000e-005**	**0.0000**	**4.7600e-003**

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	9.0900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0682					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.3000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.4600e-003	4.4600e-003	1.0000e-005	0.0000	4.7600e-003
Total	**0.0776**	**2.0000e-005**	**2.3000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.4600e-003**	**4.4600e-003**	**1.0000e-005**	**0.0000**	**4.7600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.7757	0.0705	1.7200e-003	11.0521
Unmitigated	10.6660	0.0882	2.1500e-003	13.5105

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market (24 Hour)	0.733318 / 0.449453	3.5769	0.0240	5.9000e-004	4.3537
Fast Food Restaurant with Drive Thru	1.7605 / 0.112372	6.1174	0.0576	1.4000e-003	7.9740
Gasoline/Service Station	0.199228 / 0.122108	0.9718	6.5300e-003	1.6000e-004	1.1828
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**10.6660**	**0.0882**	**2.1500e-003**	**13.5105**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market (24 Hour)	0.586654 / 0.422036	3.0211	0.0192	4.7000e-004	3.6431
Fast Food Restaurant with Drive Thru	1.4084 / 0.105517	4.9338	0.0461	1.1200e-003	6.4192
Gasoline/Service Station	0.159383 / 0.114659	0.8208	5.2300e-003	1.3000e-004	0.9898
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**8.7757**	**0.0705**	**1.7200e-003**	**11.0521**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.6205	0.6277	0.0000	26.3118
Unmitigated	21.2410	1.2553	0.0000	52.6236

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market (24 Hour)	29.75	6.0390	0.3569	0.0000	14.9613
Fast Food Restaurant with Drive Thru	66.81	13.5618	0.8015	0.0000	33.5989
Gasoline/Service Station	8.08	1.6402	0.0969	0.0000	4.0634
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**21.2410**	**1.2553**	**0.0000**	**52.6236**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market (24 Hour)	14.875	3.0195	0.1785	0.0000	7.4807
Fast Food Restaurant with Drive Thru	33.405	6.7809	0.4007	0.0000	16.7994
Gasoline/Service Station	4.04	0.8201	0.0485	0.0000	2.0317
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**10.6205**	**0.6277**	**0.0000**	**26.3118**

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

Annual VMT	3,468,845
Trips	7,152
Passby	55%

	Daily Grams		Annual	
	grams	pounds	tons	metric tons
NOX	2898.7	6.4	1.2	1.1
PM2.5	218.0	0.5	0.1	0.1
PM10	495.7	1.1	0.2	0.2
ROG	3609.2	8.0	1.5	1.3
TOG	3970.9	8.8	1.6	1.4
CO	21402.2	47.2	8.6	7.8
SOX	34.9	0.1	0.0	0.0

Daily Emissions					
ROG	NOX	CO	SOX	PM10	PM2.5
7.96	6.39	47.18	0.08	1.09	0.48

Appendix B

On-Site EMFAC, AERMOD, and Risk Assessment Results

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calendar year	season month	sub_area	vehicle class	fuel	relative tempe	humidity	process	speed time	pollutant	emission rate
2021	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.055197
2021	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.018506
2021	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.005144
2021	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.001032
2021	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.102819
2021	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.045715
2021	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004552
2021	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000888
2021	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.010883
2021	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.004754
2021	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.793949
2021	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2021	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.079915
2021	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2021	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078345
2021	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.036163
2021	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027452
2021	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.086172
2021	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012047
2021	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129939
2021	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.075901
2021	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2021	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2022	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.051593
2022	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.017554
2022	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.005055
2022	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.00101
2022	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.043124
2022	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.023306
2022	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004501
2022	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000873
2022	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.010185
2022	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.004506
2022	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.792556
2022	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2022	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.079931
2022	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2022	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.07834
2022	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.023276
2022	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027441
2022	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.086204
2022	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012048
2022	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129926

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calendar year	season month	sub_area	vehicle class	fuel	relative tempe	relative humidity	process	speed time	pollutant	emission rate
2022	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.068954
2022	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2022	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2023	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.048205
2023	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.016652
2023	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004982
2023	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000991
2023	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.009399
2023	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008777
2023	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004484
2023	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000866
2023	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.009576
2023	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.004291
2023	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.791841
2023	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2023	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.079945
2023	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2023	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078334
2023	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.015552
2023	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027433
2023	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.086228
2023	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.01205
2023	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129908
2023	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.063031
2023	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2023	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2024	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.045028
2024	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.015802
2024	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004926
2024	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000974
2024	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.009348
2024	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008893
2024	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004489
2024	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000864
2024	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.009024
2024	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.004103
2024	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.791262
2024	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2024	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.079957
2024	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2024	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078328
2024	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.01483
2024	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027427

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calendar year	season month	sub_area	vehicle class	fuel	relative tempe	relative humidity	process	speed time	pollutant	emission rate
2024	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.086244
2024	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012053
2024	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129888
2024	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.057624
2024	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2024	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2025	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.042095
2025	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.015013
2025	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004888
2025	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000962
2025	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.009235
2025	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008925
2025	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004514
2025	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000866
2025	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.008514
2025	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003933
2025	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.791555
2025	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2025	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.079968
2025	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2025	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.07832
2025	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.014209
2025	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027429
2025	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.086238
2025	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012055
2025	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129868
2025	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.052635
2025	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2025	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2026	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.039322
2026	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.01426
2026	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004863
2026	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000953
2026	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.009093
2026	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008908
2026	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.00455
2026	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000872
2026	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.008077
2026	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003779
2026	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.791961
2026	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2026	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.079978
2026	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008

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2026	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.07831
2026	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.013664
2026	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027438
2026	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.086214
2026	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012057
2026	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129847
2026	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.048338
2026	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2026	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2027	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.036739
2027	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.013553
2027	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004863
2027	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.00095
2027	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008928
2027	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008865
2027	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004587
2027	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000878
2027	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.007693
2027	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003641
2027	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.792008
2027	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2027	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.079987
2027	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2027	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078298
2027	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.013086
2027	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027446
2027	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.08619
2027	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.01206
2027	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129826
2027	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.044553
2027	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2027	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2028	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.034364
2028	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.012895
2028	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004869
2028	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000948
2028	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008804
2028	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008828
2028	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004626
2028	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000884
2028	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.007422
2028	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003523
2028	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.792393

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2028	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2028	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.079995
2028	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2028	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078286
2028	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.012697
2028	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027463
2028	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.086141
2028	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012062
2028	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129806
2028	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.041513
2028	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2028	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2029	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.032167
2029	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.012281
2029	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004874
2029	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000944
2029	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008666
2029	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008775
2029	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004662
2029	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.00089
2029	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.007109
2029	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003419
2029	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.791921
2029	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2029	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080003
2029	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2029	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078275
2029	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.012283
2029	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027482
2029	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.086088
2029	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012064
2029	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129788
2029	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.038425
2029	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2029	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2030	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.030175
2030	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.011717
2030	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004872
2030	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000939
2030	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008532
2030	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008718
2030	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004698
2030	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000897

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2030	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.006902
2030	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003333
2030	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.791719
2030	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2030	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080009
2030	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2030	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078263
2030	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.011879
2030	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027503
2030	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.086027
2030	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012066
2030	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129774
2030	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.035948
2030	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2030	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2031	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.02839
2031	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.011206
2031	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004867
2031	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000933
2031	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008412
2031	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008667
2031	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004732
2031	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000903
2031	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.006711
2031	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.00326
2031	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.791242
2031	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2031	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080015
2031	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2031	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078251
2031	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.011528
2031	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027519
2031	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085981
2031	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012068
2031	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129761
2031	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.033764
2031	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2031	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2032	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.026818
2032	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.01075
2032	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004865
2032	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000928
2032	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008319

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2032	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008625
2032	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004759
2032	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000908
2032	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.006524
2032	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003193
2032	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.791768
2032	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2032	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.08002
2032	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2032	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078238
2032	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.011322
2032	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027536
2032	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085933
2032	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012069
2032	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.12975
2032	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.031668
2032	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2032	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2033	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.02543
2033	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.010342
2033	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004854
2033	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000926
2033	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008228
2033	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008584
2033	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004782
2033	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000913
2033	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.006404
2033	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003139
2033	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.79231
2033	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2033	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080024
2033	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2033	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078226
2033	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.011129
2033	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027554
2033	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.08588
2033	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.01207
2033	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129741
2033	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.030319
2033	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2033	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2034	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.024156
2034	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.009962

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2034	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.00482
2034	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.00092
2034	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008131
2034	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008534
2034	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004801
2034	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000916
2034	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.006298
2034	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003095
2034	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.791977
2034	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2034	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080027
2034	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2034	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078215
2034	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.010938
2034	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027575
2034	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085823
2034	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012071
2034	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129734
2034	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.028852
2034	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2034	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2035	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.022928
2035	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.009593
2035	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004793
2035	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000915
2035	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008044
2035	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008487
2035	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.00482
2035	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.00092
2035	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.006209
2035	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003059
2035	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.791354
2035	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2035	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.08003
2035	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2035	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078205
2035	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.010771
2035	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027595
2035	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085764
2035	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012071
2035	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129728
2035	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.027793
2035	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036

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2035	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2036	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.02196
2036	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.009299
2036	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004804
2036	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000917
2036	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007979
2036	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008457
2036	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004837
2036	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000923
2036	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.006151
2036	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003033
2036	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.791903
2036	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2036	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080033
2036	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2036	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078195
2036	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.01065
2036	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.02762
2036	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085694
2036	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012072
2036	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129724
2036	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.026988
2036	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2036	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2037	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.021052
2037	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.009021
2037	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004811
2037	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000918
2037	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007934
2037	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008435
2037	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.00485
2037	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000926
2037	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.006072
2037	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.003009
2037	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.792455
2037	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2037	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080036
2037	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2037	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078187
2037	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.010556
2037	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027645
2037	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085622
2037	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012072

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2037	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.12972
2037	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.026059
2037	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2037	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2038	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.020253
2038	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.008771
2038	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.00482
2038	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.00092
2038	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007899
2038	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.00842
2038	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004861
2038	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000928
2038	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.005956
2038	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002982
2038	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.792845
2038	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2038	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080037
2038	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2038	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078179
2038	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.010471
2038	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.02767
2038	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085549
2038	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012073
2038	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129717
2038	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.025117
2038	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2038	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2039	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.019536
2039	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.008546
2039	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004824
2039	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000921
2039	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007875
2039	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008413
2039	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004869
2039	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000929
2039	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.005826
2039	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002949
2039	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.793586
2039	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2039	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080038
2039	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2039	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078172
2039	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.010391

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2039	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027695
2039	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085477
2039	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012073
2039	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129715
2039	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.024088
2039	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2039	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2040	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.018922
2040	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.008351
2040	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004827
2040	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000921
2040	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007857
2040	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008411
2040	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004876
2040	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.00093
2040	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.005658
2040	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002906
2040	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.794221
2040	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2040	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080041
2040	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2040	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078167
2040	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.010317
2040	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027721
2040	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085404
2040	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012073
2040	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129713
2040	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.022819
2040	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2040	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2041	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.018414
2041	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.008186
2041	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.00484
2041	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000924
2041	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.00784
2041	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.00841
2041	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004881
2041	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000931
2041	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.005493
2041	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002856
2041	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.794735
2041	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2041	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080045

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2041	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2041	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078162
2041	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.010251
2041	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027735
2041	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085365
2041	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012073
2041	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129712
2041	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.021586
2041	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2041	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2042	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.017967
2042	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.008041
2042	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004849
2042	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000925
2042	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007833
2042	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008414
2042	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004886
2042	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000932
2042	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.005344
2042	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002804
2042	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.795197
2042	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2042	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080049
2042	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2042	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078158
2042	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.010202
2042	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027757
2042	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085302
2042	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012073
2042	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129711
2042	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.020367
2042	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2042	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2043	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.017622
2043	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.007927
2043	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004857
2043	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000927
2043	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007827
2043	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.00842
2043	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004891
2043	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000933
2043	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.005204
2043	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002754

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2043	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.795537
2043	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2043	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080053
2043	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2043	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078155
2043	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.010162
2043	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027778
2043	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.08524
2043	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012073
2043	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129711
2043	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.019094
2043	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2043	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2044	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.017271
2044	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.007815
2044	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004861
2044	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000928
2044	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007821
2044	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008427
2044	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004894
2044	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000934
2044	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.005089
2044	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.00271
2044	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.795944
2044	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2044	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080054
2044	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2044	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078153
2044	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.010118
2044	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.0278
2044	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085178
2044	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012073
2044	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.12971
2044	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.01797
2044	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2044	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2045	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.01698
2045	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.007721
2045	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004864
2045	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000928
2045	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007815
2045	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008434
2045	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004897

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2045	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000935
2045	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.004989
2045	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002672
2045	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.796279
2045	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2045	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080054
2045	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2045	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078153
2045	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.01008
2045	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027822
2045	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085117
2045	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012073
2045	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.12971
2045	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.016873
2045	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2045	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2046	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.016703
2046	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.007633
2046	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004865
2046	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000928
2046	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007808
2046	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.00844
2046	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004899
2046	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000935
2046	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.004854
2046	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002633
2046	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.796621
2046	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2046	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080054
2046	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2046	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078153
2046	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.010038
2046	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027839
2046	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085067
2046	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012074
2046	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.12971
2046	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.015642
2046	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2046	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2047	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.01648
2047	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.007562
2047	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004866
2047	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000929

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calendar year	season month	sub_area	vehicle class	fuel	relative tempe	humidity	process	speed time	pollutant	emission rate
2047	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007802
2047	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008445
2047	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004901
2047	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000935
2047	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.004536
2047	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002574
2047	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.796892
2047	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2047	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080055
2047	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2047	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078153
2047	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.009999
2047	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027856
2047	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.085018
2047	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012074
2047	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129709
2047	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.01348
2047	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2047	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2048	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.016266
2048	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.007494
2048	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004865
2048	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000928
2048	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007804
2048	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.00845
2048	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004903
2048	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000936
2048	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.004478
2048	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002524
2048	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.79717
2048	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2048	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080055
2048	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2048	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078154
2048	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.009976
2048	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027873
2048	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.08497
2048	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012074
2048	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129709
2048	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.012594
2048	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2048	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2049	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.016077

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calendar year	season month	sub_area	vehicle class	fuel	relative tempe	humidity	process	speed time	pollutant	emission rate
2049	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.007435
2049	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004876
2049	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000931
2049	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007808
2049	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008455
2049	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004904
2049	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000936
2049	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.004429
2049	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002481
2049	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.797424
2049	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2049	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.080054
2049	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2049	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078154
2049	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.009961
2049	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.02789
2049	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.084922
2049	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012074
2049	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129709
2049	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.011839
2049	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2049	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174
2050	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	10	PM10	0.015862
2050	Annual	San Bernardin	Truck1	Dsl	52	50	RUNEX	40	PM10	0.00737
2050	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	10	PM10	0.004882
2050	Annual	San Bernardin	Truck1	Gas	52	50	RUNEX	40	PM10	0.000932
2050	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007813
2050	Annual	San Bernardin	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008461
2050	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	10	PM10	0.004905
2050	Annual	San Bernardin	Truck2	Gas	52	50	RUNEX	40	PM10	0.000936
2050	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	10	PM10	0.004393
2050	Annual	San Bernardin	Truck2	NG	52	50	RUNEX	40	PM10	0.002449
2050	Annual	San Bernardin	Truck1	Dsl			IDLEX		PM10	0.797745
2050	Annual	San Bernardin	Truck1	Dsl			PMTW		PM10	0.012
2050	Annual	San Bernardin	Truck1	Dsl			PMBW		PM10	0.08005
2050	Annual	San Bernardin	Truck1	Gas			PMTW		PM10	0.008
2050	Annual	San Bernardin	Truck1	Gas			PMBW		PM10	0.078154
2050	Annual	San Bernardin	Truck2	Dsl			IDLEX		PM10	0.009943
2050	Annual	San Bernardin	Truck2	Dsl			PMTW		PM10	0.027906
2050	Annual	San Bernardin	Truck2	Dsl			PMBW		PM10	0.084876
2050	Annual	San Bernardin	Truck2	Gas			PMTW		PM10	0.012074
2050	Annual	San Bernardin	Truck2	Gas			PMBW		PM10	0.129709
2050	Annual	San Bernardin	Truck2	NG			IDLEX		PM10	0.01126

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calendar year	season month	sub_area	vehicle class	fuel	relative tempe	humidity	process	speed time	pollutant	emission rate
2050	Annual	San Bernardin	Truck2	NG			PMTW		PM10	0.036
2050	Annual	San Bernardin	Truck2	NG			PMBW		PM10	0.06174

GASOLINE DISPENSING SERVICE STATION

(Procedure Version 8.1 & Package N, September 1, 2017) - Risk Tool V1.103

AN:

Facility Name: oomington Commercial Cen

Deem Complete Date:

Storage Tank Type	Underground		MET Station	Banning	
Annual Throughput	2.5	million gallons /year	Distance to Resident	75	meter
T-BACT	YES		Distance to Commercial	65	meter

MICR Calculation: MICR = MICR per 1 Million gallons/yr x Annual Throughput (Million gallons/yr)

HIA & HIC Calculation: Negligible compared to Cancer risk and is not calculated.

MICR Result

	Resident	Commercial
MICR	2.350	0.257
MICR ≤ 10	**PASS**	**PASS**

Interpolation for MICR from Nearest Distances

	Residential			**Commercial**		
	near	**actual**	far	near	**actual**	far
Distance (meter)	75	**75**	100	50	**65**	75
MICR (per 1 million gasoline gallon throughput per year)	0.940	**0.9400**	0.603	0.140	**0.103**	0.078

Look up from Table 12 - MICR for Underground Storage Tank

		Downwind Distance (m)							
Station	**Receptor**	**25**	**50**	**75**	**100**	**200**	**300**	**500**	**1000**
Banning	Resident	4.208	1.703	0.940	0.603	0.186	0.093	0.039	0.013
	Commercial	0.347	0.140	0.078	0.050	0.015	0.008	0.003	0.001

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.9.0
** Lakes Environmental Software Inc.
** Date: 7/20/2020
** File: C:\Vista Env\2019\19106 Bloomington\AERMOD\TAC2021\TAC2021.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE Bloomington Commercial Center  DPM 2021 - 2023
   MODELOPT DFAULT CONC
   AVERTIME 24 ANNUAL
   URBANOPT 2035210 San_Bernardino_County
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL TAC2021.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** ------------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDCEDARN
** DESCRSRC Cedar Ave north of Santa Ana Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.000109
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 463414.727, 3768433.166, 315.03, 0.00, 5.67
** 463416.416, 3768805.396, 319.96, 0.00, 5.67
** ------------------------------------------------------------------------
   LOCATION L0000001     VOLUME   463414.755 3768439.262 315.10
   LOCATION L0000002     VOLUME   463414.810 3768451.454 315.50
   LOCATION L0000003     VOLUME   463414.865 3768463.645 315.91
   LOCATION L0000004     VOLUME   463414.921 3768475.837 316.00
   LOCATION L0000005     VOLUME   463414.976 3768488.029 316.00
```

```
   LOCATION L0000006     VOLUME   463415.031 3768500.221 316.00
   LOCATION L0000007     VOLUME   463415.087 3768512.413 316.00
   LOCATION L0000008     VOLUME   463415.142 3768524.605 316.00
   LOCATION L0000009     VOLUME   463415.197 3768536.797 316.30
   LOCATION L0000010     VOLUME   463415.253 3768548.989 316.64
   LOCATION L0000011     VOLUME   463415.308 3768561.180 316.88
   LOCATION L0000012     VOLUME   463415.363 3768573.372 316.94
   LOCATION L0000013     VOLUME   463415.419 3768585.564 317.00
   LOCATION L0000014     VOLUME   463415.474 3768597.756 317.00
   LOCATION L0000015     VOLUME   463415.529 3768609.948 317.00
   LOCATION L0000016     VOLUME   463415.585 3768622.140 317.00
   LOCATION L0000017     VOLUME   463415.640 3768634.332 317.00
   LOCATION L0000018     VOLUME   463415.695 3768646.524 317.01
   LOCATION L0000019     VOLUME   463415.751 3768658.715 317.36
   LOCATION L0000020     VOLUME   463415.806 3768670.907 317.71
   LOCATION L0000021     VOLUME   463415.861 3768683.099 317.90
   LOCATION L0000022     VOLUME   463415.917 3768695.291 317.95
   LOCATION L0000023     VOLUME   463415.972 3768707.483 318.04
   LOCATION L0000024     VOLUME   463416.027 3768719.675 318.44
   LOCATION L0000025     VOLUME   463416.083 3768731.867 318.85
   LOCATION L0000026     VOLUME   463416.138 3768744.058 319.00
   LOCATION L0000027     VOLUME   463416.193 3768756.250 319.00
   LOCATION L0000028     VOLUME   463416.249 3768768.442 319.07
   LOCATION L0000029     VOLUME   463416.304 3768780.634 319.48
   LOCATION L0000030     VOLUME   463416.359 3768792.826 319.88
   LOCATION L0000031     VOLUME   463416.415 3768805.018 320.29
** End of LINE VOLUME Source ID = RDCEDARN
** ----------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDCEDARM
** DESCRSRC Cedar Ave south of Santa Ana Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000301
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 463415.239, 3768416.590, 314.95, 0.00, 5.67
** 463415.503, 3768290.751, 312.02, 0.00, 5.67
** ----------------------------------------------------------------
   LOCATION L0000032     VOLUME   463415.252 3768410.494 315.00
   LOCATION L0000033     VOLUME   463415.277 3768398.302 314.73
   LOCATION L0000034     VOLUME   463415.303 3768386.110 314.33
   LOCATION L0000035     VOLUME   463415.328 3768373.918 314.00
   LOCATION L0000036     VOLUME   463415.354 3768361.726 314.00
   LOCATION L0000037     VOLUME   463415.380 3768349.534 314.00
   LOCATION L0000038     VOLUME   463415.405 3768337.342 313.70
   LOCATION L0000039     VOLUME   463415.431 3768325.150 313.29
   LOCATION L0000040     VOLUME   463415.456 3768312.958 312.89
   LOCATION L0000041     VOLUME   463415.482 3768300.766 312.48
** End of LINE VOLUME Source ID = RDCEDARM
** ----------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
```

```
** LINE VOLUME Source ID = RDCEDARS
** DESCRSRC Cedar Ave south of Project DW #1
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000858
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 463415.796, 3768282.694, 312.03, 0.00, 5.67
** 463414.953, 3767815.577, 306.90, 0.00, 5.67
** ----------------------------------------------------------------------
   LOCATION L0000042     VOLUME   463415.785 3768276.598 312.00
   LOCATION L0000043     VOLUME   463415.763 3768264.406 312.00
   LOCATION L0000044     VOLUME   463415.741 3768252.214 311.86
   LOCATION L0000045     VOLUME   463415.719 3768240.022 311.46
   LOCATION L0000046     VOLUME   463415.697 3768227.830 311.05
   LOCATION L0000047     VOLUME   463415.675 3768215.638 311.00
   LOCATION L0000048     VOLUME   463415.653 3768203.446 311.00
   LOCATION L0000049     VOLUME   463415.631 3768191.254 311.00
   LOCATION L0000050     VOLUME   463415.609 3768179.062 311.00
   LOCATION L0000051     VOLUME   463415.587 3768166.870 311.00
   LOCATION L0000052     VOLUME   463415.565 3768154.678 310.61
   LOCATION L0000053     VOLUME   463415.543 3768142.486 310.20
   LOCATION L0000054     VOLUME   463415.521 3768130.294 310.00
   LOCATION L0000055     VOLUME   463415.499 3768118.102 310.00
   LOCATION L0000056     VOLUME   463415.477 3768105.910 310.00
   LOCATION L0000057     VOLUME   463415.455 3768093.718 310.00
   LOCATION L0000058     VOLUME   463415.433 3768081.527 310.00
   LOCATION L0000059     VOLUME   463415.411 3768069.335 310.00
   LOCATION L0000060     VOLUME   463415.389 3768057.143 310.00
   LOCATION L0000061     VOLUME   463415.367 3768044.951 309.95
   LOCATION L0000062     VOLUME   463415.345 3768032.759 309.55
   LOCATION L0000063     VOLUME   463415.323 3768020.567 309.14
   LOCATION L0000064     VOLUME   463415.301 3768008.375 309.00
   LOCATION L0000065     VOLUME   463415.279 3767996.183 309.00
   LOCATION L0000066     VOLUME   463415.257 3767983.991 309.00
   LOCATION L0000067     VOLUME   463415.235 3767971.799 309.00
   LOCATION L0000068     VOLUME   463415.213 3767959.607 309.00
   LOCATION L0000069     VOLUME   463415.191 3767947.415 309.00
   LOCATION L0000070     VOLUME   463415.169 3767935.223 309.00
   LOCATION L0000071     VOLUME   463415.147 3767923.031 308.89
   LOCATION L0000072     VOLUME   463415.125 3767910.839 308.48
   LOCATION L0000073     VOLUME   463415.103 3767898.647 308.08
   LOCATION L0000074     VOLUME   463415.081 3767886.455 307.72
   LOCATION L0000075     VOLUME   463415.059 3767874.263 307.38
   LOCATION L0000076     VOLUME   463415.037 3767862.071 307.13
   LOCATION L0000077     VOLUME   463415.015 3767849.879 307.07
   LOCATION L0000078     VOLUME   463414.993 3767837.687 307.01
   LOCATION L0000079     VOLUME   463414.971 3767825.495 307.00
** End of LINE VOLUME Source ID = RDCEDARS
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDSANTAW
```

```
** DESCRSRC Santa Ana Ave west of Cedar Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000482
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 463403.005, 3768425.077, 315.00, 0.00, 5.67
** 463229.069, 3768427.239, 315.05, 0.00, 5.67
** 463027.735, 3768431.316, 316.00, 0.00, 5.67
** ----------------------------------------------------------------------
   LOCATION L0000080     VOLUME   463396.909 3768425.153 315.00
   LOCATION L0000081     VOLUME   463384.718 3768425.305 315.00
   LOCATION L0000082     VOLUME   463372.527 3768425.456 315.00
   LOCATION L0000083     VOLUME   463360.336 3768425.608 315.00
   LOCATION L0000084     VOLUME   463348.145 3768425.759 315.00
   LOCATION L0000085     VOLUME   463335.954 3768425.911 315.00
   LOCATION L0000086     VOLUME   463323.763 3768426.062 315.00
   LOCATION L0000087     VOLUME   463311.572 3768426.214 315.00
   LOCATION L0000088     VOLUME   463299.381 3768426.365 315.00
   LOCATION L0000089     VOLUME   463287.190 3768426.517 315.00
   LOCATION L0000090     VOLUME   463274.998 3768426.669 315.00
   LOCATION L0000091     VOLUME   463262.807 3768426.820 315.00
   LOCATION L0000092     VOLUME   463250.616 3768426.972 315.00
   LOCATION L0000093     VOLUME   463238.425 3768427.123 315.00
   LOCATION L0000094     VOLUME   463226.235 3768427.297 315.00
   LOCATION L0000095     VOLUME   463214.045 3768427.544 315.00
   LOCATION L0000096     VOLUME   463201.856 3768427.790 315.19
   LOCATION L0000097     VOLUME   463189.666 3768428.037 315.48
   LOCATION L0000098     VOLUME   463177.477 3768428.284 315.73
   LOCATION L0000099     VOLUME   463165.287 3768428.531 315.74
   LOCATION L0000100     VOLUME   463153.098 3768428.778 315.75
   LOCATION L0000101     VOLUME   463140.908 3768429.024 315.76
   LOCATION L0000102     VOLUME   463128.719 3768429.271 315.76
   LOCATION L0000103     VOLUME   463116.529 3768429.518 315.80
   LOCATION L0000104     VOLUME   463104.340 3768429.765 315.89
   LOCATION L0000105     VOLUME   463092.150 3768430.012 315.98
   LOCATION L0000106     VOLUME   463079.961 3768430.258 316.00
   LOCATION L0000107     VOLUME   463067.771 3768430.505 316.00
   LOCATION L0000108     VOLUME   463055.582 3768430.752 316.00
   LOCATION L0000109     VOLUME   463043.392 3768430.999 316.00
   LOCATION L0000110     VOLUME   463031.203 3768431.246 316.00
** End of LINE VOLUME Source ID = RDSANTAW
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDSANTAM
** DESCRSRC Santa Ana Ave east of Cedar Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000736
** Vertical Dimension = 1.83
** SZINIT = 0.85
```

```
** Nodes = 2
** 463426.168, 3768425.210, 315.13, 0.00, 5.67
** 463593.391, 3768427.417, 315.00, 0.00, 5.67
** ----------------------------------------------------------------------
   LOCATION L0000111     VOLUME   463432.264 3768425.291 315.27
   LOCATION L0000112     VOLUME   463444.454 3768425.452 315.53
   LOCATION L0000113     VOLUME   463456.645 3768425.613 315.64
   LOCATION L0000114     VOLUME   463468.836 3768425.774 315.65
   LOCATION L0000115     VOLUME   463481.027 3768425.934 315.65
   LOCATION L0000116     VOLUME   463493.218 3768426.095 315.66
   LOCATION L0000117     VOLUME   463505.409 3768426.256 315.66
   LOCATION L0000118     VOLUME   463517.600 3768426.417 315.67
   LOCATION L0000119     VOLUME   463529.791 3768426.578 315.67
   LOCATION L0000120     VOLUME   463541.982 3768426.739 315.63
   LOCATION L0000121     VOLUME   463554.173 3768426.900 315.35
   LOCATION L0000122     VOLUME   463566.364 3768427.061 315.08
   LOCATION L0000123     VOLUME   463578.555 3768427.221 315.00
   LOCATION L0000124     VOLUME   463590.746 3768427.382 315.00
** End of LINE VOLUME Source ID = RDSANTAM
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDSANTAE
** DESCRSRC Santa Ana Ave east of Project DW #3
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000267
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 463612.901, 3768428.869, 315.00, 0.00, 5.67
** 463738.671, 3768429.839, 314.04, 0.00, 5.67
** 463977.071, 3768425.518, 312.06, 0.00, 5.67
** ----------------------------------------------------------------------
   LOCATION L0000125     VOLUME   463618.996 3768428.916 315.00
   LOCATION L0000126     VOLUME   463631.188 3768429.010 314.99
   LOCATION L0000127     VOLUME   463643.380 3768429.104 314.89
   LOCATION L0000128     VOLUME   463655.571 3768429.198 314.79
   LOCATION L0000129     VOLUME   463667.763 3768429.292 314.76
   LOCATION L0000130     VOLUME   463679.955 3768429.386 314.77
   LOCATION L0000131     VOLUME   463692.146 3768429.480 314.71
   LOCATION L0000132     VOLUME   463704.338 3768429.574 314.40
   LOCATION L0000133     VOLUME   463716.530 3768429.668 314.08
   LOCATION L0000134     VOLUME   463728.721 3768429.762 314.00
   LOCATION L0000135     VOLUME   463740.913 3768429.798 314.00
   LOCATION L0000136     VOLUME   463753.103 3768429.577 314.00
   LOCATION L0000137     VOLUME   463765.293 3768429.356 314.00
   LOCATION L0000138     VOLUME   463777.483 3768429.135 314.00
   LOCATION L0000139     VOLUME   463789.673 3768428.914 313.92
   LOCATION L0000140     VOLUME   463801.863 3768428.694 313.81
   LOCATION L0000141     VOLUME   463814.053 3768428.473 313.63
   LOCATION L0000142     VOLUME   463826.243 3768428.252 313.33
   LOCATION L0000143     VOLUME   463838.433 3768428.031 313.03
   LOCATION L0000144     VOLUME   463850.623 3768427.810 313.00
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   LOCATION L0000145     VOLUME   463862.813 3768427.589 313.00
   LOCATION L0000146     VOLUME   463875.003 3768427.368 313.00
   LOCATION L0000147     VOLUME   463887.193 3768427.147 313.00
   LOCATION L0000148     VOLUME   463899.383 3768426.926 313.00
   LOCATION L0000149     VOLUME   463911.573 3768426.705 313.00
   LOCATION L0000150     VOLUME   463923.763 3768426.484 313.00
   LOCATION L0000151     VOLUME   463935.953 3768426.264 312.79
   LOCATION L0000152     VOLUME   463948.143 3768426.043 312.38
   LOCATION L0000153     VOLUME   463960.333 3768425.822 312.00
   LOCATION L0000154     VOLUME   463972.523 3768425.601 312.00
** End of LINE VOLUME Source ID = RDSANTAE
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDONSITE
** DESCRSRC Onsite between DW #1 and DW #3
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 0.000461
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 463430.577, 3768288.087, 312.20, 0.00, 1.70
** 463607.685, 3768286.634, 313.00, 0.00, 1.70
** 463605.024, 3768419.033, 314.94, 0.00, 1.70
** ----------------------------------------------------------------------
   LOCATION L0000155     VOLUME   463432.406 3768288.072 312.46
   LOCATION L0000156     VOLUME   463436.063 3768288.042 312.57
   LOCATION L0000157     VOLUME   463439.721 3768288.012 312.69
   LOCATION L0000158     VOLUME   463443.378 3768287.982 312.80
   LOCATION L0000159     VOLUME   463447.036 3768287.952 312.92
   LOCATION L0000160     VOLUME   463450.693 3768287.922 313.00
   LOCATION L0000161     VOLUME   463454.351 3768287.892 313.00
   LOCATION L0000162     VOLUME   463458.008 3768287.862 313.00
   LOCATION L0000163     VOLUME   463461.666 3768287.832 313.00
   LOCATION L0000164     VOLUME   463465.323 3768287.802 313.00
   LOCATION L0000165     VOLUME   463468.981 3768287.772 313.00
   LOCATION L0000166     VOLUME   463472.638 3768287.742 313.00
   LOCATION L0000167     VOLUME   463476.296 3768287.712 313.00
   LOCATION L0000168     VOLUME   463479.953 3768287.682 313.00
   LOCATION L0000169     VOLUME   463483.611 3768287.652 313.00
   LOCATION L0000170     VOLUME   463487.268 3768287.622 313.00
   LOCATION L0000171     VOLUME   463490.926 3768287.592 313.00
   LOCATION L0000172     VOLUME   463494.583 3768287.562 313.00
   LOCATION L0000173     VOLUME   463498.241 3768287.532 313.00
   LOCATION L0000174     VOLUME   463501.898 3768287.502 313.00
   LOCATION L0000175     VOLUME   463505.555 3768287.472 313.00
   LOCATION L0000176     VOLUME   463509.213 3768287.442 313.00
   LOCATION L0000177     VOLUME   463512.870 3768287.412 313.00
   LOCATION L0000178     VOLUME   463516.528 3768287.382 313.00
   LOCATION L0000179     VOLUME   463520.185 3768287.352 313.00
   LOCATION L0000180     VOLUME   463523.843 3768287.322 313.00
   LOCATION L0000181     VOLUME   463527.500 3768287.292 313.00
   LOCATION L0000182     VOLUME   463531.158 3768287.262 313.00
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LOCATION L0000183 VOLUME 463534.815 3768287.232 313.00
LOCATION L0000184 VOLUME 463538.473 3768287.202 313.00
LOCATION L0000185 VOLUME 463542.130 3768287.172 313.00
LOCATION L0000186 VOLUME 463545.788 3768287.142 313.00
LOCATION L0000187 VOLUME 463549.445 3768287.112 313.00
LOCATION L0000188 VOLUME 463553.103 3768287.082 313.00
LOCATION L0000189 VOLUME 463556.760 3768287.052 313.00
LOCATION L0000190 VOLUME 463560.418 3768287.022 313.00
LOCATION L0000191 VOLUME 463564.075 3768286.992 313.00
LOCATION L0000192 VOLUME 463567.733 3768286.962 313.00
LOCATION L0000193 VOLUME 463571.390 3768286.932 313.00
LOCATION L0000194 VOLUME 463575.048 3768286.902 313.00
LOCATION L0000195 VOLUME 463578.705 3768286.872 313.00
LOCATION L0000196 VOLUME 463582.362 3768286.841 313.00
LOCATION L0000197 VOLUME 463586.020 3768286.811 313.00
LOCATION L0000198 VOLUME 463589.677 3768286.781 313.00
LOCATION L0000199 VOLUME 463593.335 3768286.751 313.00
LOCATION L0000200 VOLUME 463596.992 3768286.721 313.00
LOCATION L0000201 VOLUME 463600.650 3768286.691 313.00
LOCATION L0000202 VOLUME 463604.307 3768286.661 313.00
LOCATION L0000203 VOLUME 463607.679 3768286.913 313.00
LOCATION L0000204 VOLUME 463607.606 3768290.570 313.00
LOCATION L0000205 VOLUME 463607.532 3768294.227 313.00
LOCATION L0000206 VOLUME 463607.459 3768297.884 313.00
LOCATION L0000207 VOLUME 463607.385 3768301.541 313.00
LOCATION L0000208 VOLUME 463607.312 3768305.198 313.00
LOCATION L0000209 VOLUME 463607.238 3768308.855 313.00
LOCATION L0000210 VOLUME 463607.165 3768312.511 313.00
LOCATION L0000211 VOLUME 463607.091 3768316.168 313.00
LOCATION L0000212 VOLUME 463607.018 3768319.825 313.12
LOCATION L0000213 VOLUME 463606.944 3768323.482 313.24
LOCATION L0000214 VOLUME 463606.871 3768327.139 313.36
LOCATION L0000215 VOLUME 463606.797 3768330.796 313.48
LOCATION L0000216 VOLUME 463606.724 3768334.453 313.60
LOCATION L0000217 VOLUME 463606.650 3768338.109 313.73
LOCATION L0000218 VOLUME 463606.577 3768341.766 313.85
LOCATION L0000219 VOLUME 463606.503 3768345.423 313.97
LOCATION L0000220 VOLUME 463606.430 3768349.080 314.00
LOCATION L0000221 VOLUME 463606.356 3768352.737 314.00
LOCATION L0000222 VOLUME 463606.283 3768356.394 314.00
LOCATION L0000223 VOLUME 463606.209 3768360.051 314.00
LOCATION L0000224 VOLUME 463606.136 3768363.708 314.00
LOCATION L0000225 VOLUME 463606.062 3768367.364 314.00
LOCATION L0000226 VOLUME 463605.989 3768371.021 314.00
LOCATION L0000227 VOLUME 463605.915 3768374.678 314.00
LOCATION L0000228 VOLUME 463605.842 3768378.335 314.07
LOCATION L0000229 VOLUME 463605.768 3768381.992 314.19
LOCATION L0000230 VOLUME 463605.695 3768385.649 314.31
LOCATION L0000231 VOLUME 463605.621 3768389.306 314.43
LOCATION L0000232 VOLUME 463605.548 3768392.962 314.55
LOCATION L0000233 VOLUME 463605.474 3768396.619 314.68
LOCATION L0000234 VOLUME 463605.401 3768400.276 314.80
LOCATION L0000235 VOLUME 463605.327 3768403.933 314.92
LOCATION L0000236 VOLUME 463605.254 3768407.590 315.00

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   LOCATION L0000237     VOLUME   463605.180 3768411.247 315.00
   LOCATION L0000238     VOLUME   463605.107 3768414.904 315.00
   LOCATION L0000239     VOLUME   463605.033 3768418.560 315.00
** End of LINE VOLUME Source ID = RDONSITE
   LOCATION IDLE         POINT      463533.120  3768350.980      314.000
** DESCRSRC Idling - All Trucks
** Source Parameters **
** LINE VOLUME Source ID = RDCEDARN
   SRCPARAM L0000001     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000002     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000003     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000004     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000005     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000006     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000007     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000008     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000009     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000010     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000011     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000012     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000013     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000014     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000015     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000016     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000017     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000018     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000019     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000020     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000021     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000022     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000023     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000024     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000025     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000026     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000027     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000028     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000029     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000030     0.000003516      0.00      5.67      0.85
   SRCPARAM L0000031     0.000003516      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDCEDARM
   SRCPARAM L0000032     0.00000301      0.00      5.67      0.85
   SRCPARAM L0000033     0.00000301      0.00      5.67      0.85
   SRCPARAM L0000034     0.00000301      0.00      5.67      0.85
   SRCPARAM L0000035     0.00000301      0.00      5.67      0.85
   SRCPARAM L0000036     0.00000301      0.00      5.67      0.85
   SRCPARAM L0000037     0.00000301      0.00      5.67      0.85
   SRCPARAM L0000038     0.00000301      0.00      5.67      0.85
   SRCPARAM L0000039     0.00000301      0.00      5.67      0.85
   SRCPARAM L0000040     0.00000301      0.00      5.67      0.85
   SRCPARAM L0000041     0.00000301      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDCEDARS
   SRCPARAM L0000042     0.000002258      0.00      5.67      0.85
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   SRCPARAM L0000043     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000044     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000045     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000046     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000047     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000048     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000049     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000050     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000051     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000052     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000053     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000054     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000055     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000056     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000057     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000058     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000059     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000060     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000061     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000062     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000063     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000064     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000065     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000066     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000067     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000068     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000069     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000070     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000071     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000072     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000073     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000074     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000075     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000076     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000077     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000078     0.000002258      0.00      5.67      0.85
   SRCPARAM L0000079     0.000002258      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDSANTAW
   SRCPARAM L0000080     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000081     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000082     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000083     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000084     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000085     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000086     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000087     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000088     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000089     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000090     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000091     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000092     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000093     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000094     0.000001555      0.00      5.67      0.85
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   SRCPARAM L0000095     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000096     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000097     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000098     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000099     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000100     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000101     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000102     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000103     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000104     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000105     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000106     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000107     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000108     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000109     0.000001555      0.00      5.67      0.85
   SRCPARAM L0000110     0.000001555      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDSANTAM
   SRCPARAM L0000111     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000112     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000113     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000114     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000115     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000116     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000117     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000118     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000119     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000120     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000121     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000122     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000123     0.000005257      0.00      5.67      0.85
   SRCPARAM L0000124     0.000005257      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDSANTAE
   SRCPARAM L0000125     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000126     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000127     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000128     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000129     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000130     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000131     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000132     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000133     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000134     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000135     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000136     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000137     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000138     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000139     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000140     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000141     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000142     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000143     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000144     0.00000089      0.00      5.67      0.85
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   SRCPARAM L0000145     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000146     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000147     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000148     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000149     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000150     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000151     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000152     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000153     0.00000089      0.00      5.67      0.85
   SRCPARAM L0000154     0.00000089      0.00      5.67      0.85
** ----------------------------------------------------------------------
** LINE VOLUME Source ID = RDONSITE
   SRCPARAM L0000155     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000156     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000157     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000158     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000159     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000160     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000161     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000162     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000163     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000164     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000165     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000166     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000167     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000168     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000169     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000170     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000171     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000172     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000173     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000174     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000175     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000176     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000177     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000178     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000179     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000180     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000181     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000182     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000183     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000184     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000185     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000186     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000187     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000188     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000189     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000190     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000191     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000192     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000193     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000194     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000195     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000196     0.000005424      0.00      1.70      0.85
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   SRCPARAM L0000197     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000198     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000199     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000200     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000201     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000202     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000203     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000204     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000205     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000206     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000207     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000208     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000209     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000210     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000211     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000212     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000213     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000214     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000215     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000216     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000217     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000218     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000219     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000220     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000221     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000222     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000223     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000224     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000225     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000226     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000227     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000228     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000229     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000230     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000231     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000232     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000233     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000234     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000235     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000236     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000237     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000238     0.000005424      0.00      1.70      0.85
   SRCPARAM L0000239     0.000005424      0.00      1.70      0.85
** ------------------------------------------------------------------
   SRCPARAM IDLE          0.000319     3.840   366.000  50.00000
0.100
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
```

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**
RE STARTING
   INCLUDED TAC2021.rou
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\FONT_V9_ADJU\FONT_v9.SFC
   PROFFILE ..\FONT_V9_ADJU\FONT_v9.PFL
   SURFDATA 3102 2011 Fontana
   UAIRDATA 3190 2011
   SITEDATA 99999 2011
   PROFBASE 367.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST TAC2021.AD\24H1GALL.PLT 31
   PLOTFILE ANNUAL ALL TAC2021.AD\AN00GALL.PLT 32
   SUMMFILE TAC2021.sum
OU FINISHED
**
****************************************
** Project Parameters
****************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS    m
** ZONE     11
** ZONEINX  0
**
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.9.0
** Lakes Environmental Software Inc.
** Date: 7/20/2020
** File: C:\Vista Env\2019\19106 Bloomington\AERMOD\TAC2024\TAC2024.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE Bloomington Commercial Center  DPM 2024 - 2038
   MODELOPT DFAULT CONC
   AVERTIME 24 ANNUAL
   URBANOPT 2035210 San_Bernardino_County
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL TAC2024.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** ------------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDCEDARN
** DESCRSRC Cedar Ave north of Santa Ana Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000375
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 463414.727, 3768433.166, 315.03, 0.00, 5.67
** 463416.416, 3768805.396, 319.96, 0.00, 5.67
** ------------------------------------------------------------------------
   LOCATION L0000240     VOLUME   463414.755 3768439.262 315.10
   LOCATION L0000241     VOLUME   463414.810 3768451.454 315.50
   LOCATION L0000242     VOLUME   463414.865 3768463.645 315.91
   LOCATION L0000243     VOLUME   463414.921 3768475.837 316.00
   LOCATION L0000244     VOLUME   463414.976 3768488.029 316.00
```

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   LOCATION L0000245     VOLUME   463415.031 3768500.221 316.00
   LOCATION L0000246     VOLUME   463415.087 3768512.413 316.00
   LOCATION L0000247     VOLUME   463415.142 3768524.605 316.00
   LOCATION L0000248     VOLUME   463415.197 3768536.797 316.30
   LOCATION L0000249     VOLUME   463415.253 3768548.989 316.64
   LOCATION L0000250     VOLUME   463415.308 3768561.180 316.88
   LOCATION L0000251     VOLUME   463415.363 3768573.372 316.94
   LOCATION L0000252     VOLUME   463415.419 3768585.564 317.00
   LOCATION L0000253     VOLUME   463415.474 3768597.756 317.00
   LOCATION L0000254     VOLUME   463415.529 3768609.948 317.00
   LOCATION L0000255     VOLUME   463415.585 3768622.140 317.00
   LOCATION L0000256     VOLUME   463415.640 3768634.332 317.00
   LOCATION L0000257     VOLUME   463415.695 3768646.524 317.01
   LOCATION L0000258     VOLUME   463415.751 3768658.715 317.36
   LOCATION L0000259     VOLUME   463415.806 3768670.907 317.71
   LOCATION L0000260     VOLUME   463415.861 3768683.099 317.90
   LOCATION L0000261     VOLUME   463415.917 3768695.291 317.95
   LOCATION L0000262     VOLUME   463415.972 3768707.483 318.04
   LOCATION L0000263     VOLUME   463416.027 3768719.675 318.44
   LOCATION L0000264     VOLUME   463416.083 3768731.867 318.85
   LOCATION L0000265     VOLUME   463416.138 3768744.058 319.00
   LOCATION L0000266     VOLUME   463416.193 3768756.250 319.00
   LOCATION L0000267     VOLUME   463416.249 3768768.442 319.07
   LOCATION L0000268     VOLUME   463416.304 3768780.634 319.48
   LOCATION L0000269     VOLUME   463416.359 3768792.826 319.88
   LOCATION L0000270     VOLUME   463416.415 3768805.018 320.29
** End of LINE VOLUME Source ID = RDCEDARN
** ----------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDCEDARM
** DESCRSRC Cedar Ave south of Santa Ana Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000103
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 463415.239, 3768416.590, 314.95, 0.00, 5.67
** 463415.503, 3768290.751, 312.02, 0.00, 5.67
** ----------------------------------------------------------------
   LOCATION L0000271     VOLUME   463415.252 3768410.494 315.00
   LOCATION L0000272     VOLUME   463415.277 3768398.302 314.73
   LOCATION L0000273     VOLUME   463415.303 3768386.110 314.33
   LOCATION L0000274     VOLUME   463415.328 3768373.918 314.00
   LOCATION L0000275     VOLUME   463415.354 3768361.726 314.00
   LOCATION L0000276     VOLUME   463415.380 3768349.534 314.00
   LOCATION L0000277     VOLUME   463415.405 3768337.342 313.70
   LOCATION L0000278     VOLUME   463415.431 3768325.150 313.29
   LOCATION L0000279     VOLUME   463415.456 3768312.958 312.89
   LOCATION L0000280     VOLUME   463415.482 3768300.766 312.48
** End of LINE VOLUME Source ID = RDCEDARM
** ----------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
```

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** LINE VOLUME Source ID = RDCEDARS
** DESCRSRC Cedar Ave south of Project DW #1
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000295
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 463415.796, 3768282.694, 312.03, 0.00, 5.67
** 463414.953, 3767815.577, 306.90, 0.00, 5.67
** ------------------------------------------------------------------
   LOCATION L0000281     VOLUME   463415.785 3768276.598 312.00
   LOCATION L0000282     VOLUME   463415.763 3768264.406 312.00
   LOCATION L0000283     VOLUME   463415.741 3768252.214 311.86
   LOCATION L0000284     VOLUME   463415.719 3768240.022 311.46
   LOCATION L0000285     VOLUME   463415.697 3768227.830 311.05
   LOCATION L0000286     VOLUME   463415.675 3768215.638 311.00
   LOCATION L0000287     VOLUME   463415.653 3768203.446 311.00
   LOCATION L0000288     VOLUME   463415.631 3768191.254 311.00
   LOCATION L0000289     VOLUME   463415.609 3768179.062 311.00
   LOCATION L0000290     VOLUME   463415.587 3768166.870 311.00
   LOCATION L0000291     VOLUME   463415.565 3768154.678 310.61
   LOCATION L0000292     VOLUME   463415.543 3768142.486 310.20
   LOCATION L0000293     VOLUME   463415.521 3768130.294 310.00
   LOCATION L0000294     VOLUME   463415.499 3768118.102 310.00
   LOCATION L0000295     VOLUME   463415.477 3768105.910 310.00
   LOCATION L0000296     VOLUME   463415.455 3768093.718 310.00
   LOCATION L0000297     VOLUME   463415.433 3768081.527 310.00
   LOCATION L0000298     VOLUME   463415.411 3768069.335 310.00
   LOCATION L0000299     VOLUME   463415.389 3768057.143 310.00
   LOCATION L0000300     VOLUME   463415.367 3768044.951 309.95
   LOCATION L0000301     VOLUME   463415.345 3768032.759 309.55
   LOCATION L0000302     VOLUME   463415.323 3768020.567 309.14
   LOCATION L0000303     VOLUME   463415.301 3768008.375 309.00
   LOCATION L0000304     VOLUME   463415.279 3767996.183 309.00
   LOCATION L0000305     VOLUME   463415.257 3767983.991 309.00
   LOCATION L0000306     VOLUME   463415.235 3767971.799 309.00
   LOCATION L0000307     VOLUME   463415.213 3767959.607 309.00
   LOCATION L0000308     VOLUME   463415.191 3767947.415 309.00
   LOCATION L0000309     VOLUME   463415.169 3767935.223 309.00
   LOCATION L0000310     VOLUME   463415.147 3767923.031 308.89
   LOCATION L0000311     VOLUME   463415.125 3767910.839 308.48
   LOCATION L0000312     VOLUME   463415.103 3767898.647 308.08
   LOCATION L0000313     VOLUME   463415.081 3767886.455 307.72
   LOCATION L0000314     VOLUME   463415.059 3767874.263 307.38
   LOCATION L0000315     VOLUME   463415.037 3767862.071 307.13
   LOCATION L0000316     VOLUME   463415.015 3767849.879 307.07
   LOCATION L0000317     VOLUME   463414.993 3767837.687 307.01
   LOCATION L0000318     VOLUME   463414.971 3767825.495 307.00
** End of LINE VOLUME Source ID = RDCEDARS
** ------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDSANTAW
```

```
** DESCRSRC Santa Ana Ave west of Cedar Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000166
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 463403.005, 3768425.077, 315.00, 0.00, 5.67
** 463229.069, 3768427.239, 315.05, 0.00, 5.67
** 463027.735, 3768431.316, 316.00, 0.00, 5.67
** ----------------------------------------------------------------------
   LOCATION L0000319     VOLUME   463396.909 3768425.153 315.00
   LOCATION L0000320     VOLUME   463384.718 3768425.305 315.00
   LOCATION L0000321     VOLUME   463372.527 3768425.456 315.00
   LOCATION L0000322     VOLUME   463360.336 3768425.608 315.00
   LOCATION L0000323     VOLUME   463348.145 3768425.759 315.00
   LOCATION L0000324     VOLUME   463335.954 3768425.911 315.00
   LOCATION L0000325     VOLUME   463323.763 3768426.062 315.00
   LOCATION L0000326     VOLUME   463311.572 3768426.214 315.00
   LOCATION L0000327     VOLUME   463299.381 3768426.365 315.00
   LOCATION L0000328     VOLUME   463287.190 3768426.517 315.00
   LOCATION L0000329     VOLUME   463274.998 3768426.669 315.00
   LOCATION L0000330     VOLUME   463262.807 3768426.820 315.00
   LOCATION L0000331     VOLUME   463250.616 3768426.972 315.00
   LOCATION L0000332     VOLUME   463238.425 3768427.123 315.00
   LOCATION L0000333     VOLUME   463226.235 3768427.297 315.00
   LOCATION L0000334     VOLUME   463214.045 3768427.544 315.00
   LOCATION L0000335     VOLUME   463201.856 3768427.790 315.19
   LOCATION L0000336     VOLUME   463189.666 3768428.037 315.48
   LOCATION L0000337     VOLUME   463177.477 3768428.284 315.73
   LOCATION L0000338     VOLUME   463165.287 3768428.531 315.74
   LOCATION L0000339     VOLUME   463153.098 3768428.778 315.75
   LOCATION L0000340     VOLUME   463140.908 3768429.024 315.76
   LOCATION L0000341     VOLUME   463128.719 3768429.271 315.76
   LOCATION L0000342     VOLUME   463116.529 3768429.518 315.80
   LOCATION L0000343     VOLUME   463104.340 3768429.765 315.89
   LOCATION L0000344     VOLUME   463092.150 3768430.012 315.98
   LOCATION L0000345     VOLUME   463079.961 3768430.258 316.00
   LOCATION L0000346     VOLUME   463067.771 3768430.505 316.00
   LOCATION L0000347     VOLUME   463055.582 3768430.752 316.00
   LOCATION L0000348     VOLUME   463043.392 3768430.999 316.00
   LOCATION L0000349     VOLUME   463031.203 3768431.246 316.00
** End of LINE VOLUME Source ID = RDSANTAW
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDSANTAM
** DESCRSRC Santa Ana Ave east of Cedar Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000253
** Vertical Dimension = 1.83
** SZINIT = 0.85
```

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** Nodes = 2
** 463426.168, 3768425.210, 315.13, 0.00, 5.67
** 463593.391, 3768427.417, 315.00, 0.00, 5.67
** ----------------------------------------------------------------------
   LOCATION L0000350     VOLUME   463432.264 3768425.291 315.27
   LOCATION L0000351     VOLUME   463444.454 3768425.452 315.53
   LOCATION L0000352     VOLUME   463456.645 3768425.613 315.64
   LOCATION L0000353     VOLUME   463468.836 3768425.774 315.65
   LOCATION L0000354     VOLUME   463481.027 3768425.934 315.65
   LOCATION L0000355     VOLUME   463493.218 3768426.095 315.66
   LOCATION L0000356     VOLUME   463505.409 3768426.256 315.66
   LOCATION L0000357     VOLUME   463517.600 3768426.417 315.67
   LOCATION L0000358     VOLUME   463529.791 3768426.578 315.67
   LOCATION L0000359     VOLUME   463541.982 3768426.739 315.63
   LOCATION L0000360     VOLUME   463554.173 3768426.900 315.35
   LOCATION L0000361     VOLUME   463566.364 3768427.061 315.08
   LOCATION L0000362     VOLUME   463578.555 3768427.221 315.00
   LOCATION L0000363     VOLUME   463590.746 3768427.382 315.00
** End of LINE VOLUME Source ID = RDSANTAM
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDSANTAE
** DESCRSRC Santa Ana Ave east of Project DW #3
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 9.18E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 463612.901, 3768428.869, 315.00, 0.00, 5.67
** 463738.671, 3768429.839, 314.04, 0.00, 5.67
** 463977.071, 3768425.518, 312.06, 0.00, 5.67
** ----------------------------------------------------------------------
   LOCATION L0000364     VOLUME   463618.996 3768428.916 315.00
   LOCATION L0000365     VOLUME   463631.188 3768429.010 314.99
   LOCATION L0000366     VOLUME   463643.380 3768429.104 314.89
   LOCATION L0000367     VOLUME   463655.571 3768429.198 314.79
   LOCATION L0000368     VOLUME   463667.763 3768429.292 314.76
   LOCATION L0000369     VOLUME   463679.955 3768429.386 314.77
   LOCATION L0000370     VOLUME   463692.146 3768429.480 314.71
   LOCATION L0000371     VOLUME   463704.338 3768429.574 314.40
   LOCATION L0000372     VOLUME   463716.530 3768429.668 314.08
   LOCATION L0000373     VOLUME   463728.721 3768429.762 314.00
   LOCATION L0000374     VOLUME   463740.913 3768429.798 314.00
   LOCATION L0000375     VOLUME   463753.103 3768429.577 314.00
   LOCATION L0000376     VOLUME   463765.293 3768429.356 314.00
   LOCATION L0000377     VOLUME   463777.483 3768429.135 314.00
   LOCATION L0000378     VOLUME   463789.673 3768428.914 313.92
   LOCATION L0000379     VOLUME   463801.863 3768428.694 313.81
   LOCATION L0000380     VOLUME   463814.053 3768428.473 313.63
   LOCATION L0000381     VOLUME   463826.243 3768428.252 313.33
   LOCATION L0000382     VOLUME   463838.433 3768428.031 313.03
   LOCATION L0000383     VOLUME   463850.623 3768427.810 313.00
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   LOCATION L0000384     VOLUME   463862.813 3768427.589 313.00
   LOCATION L0000385     VOLUME   463875.003 3768427.368 313.00
   LOCATION L0000386     VOLUME   463887.193 3768427.147 313.00
   LOCATION L0000387     VOLUME   463899.383 3768426.926 313.00
   LOCATION L0000388     VOLUME   463911.573 3768426.705 313.00
   LOCATION L0000389     VOLUME   463923.763 3768426.484 313.00
   LOCATION L0000390     VOLUME   463935.953 3768426.264 312.79
   LOCATION L0000391     VOLUME   463948.143 3768426.043 312.38
   LOCATION L0000392     VOLUME   463960.333 3768425.822 312.00
   LOCATION L0000393     VOLUME   463972.523 3768425.601 312.00
** End of LINE VOLUME Source ID = RDSANTAE
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDONSITE
** DESCRSRC Onsite between DW #1 and DW #3
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 0.0000832
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 463430.577, 3768288.087, 312.20, 0.00, 1.70
** 463607.685, 3768286.634, 313.00, 0.00, 1.70
** 463605.024, 3768419.033, 314.94, 0.00, 1.70
** ----------------------------------------------------------------------
   LOCATION L0000394     VOLUME   463432.406 3768288.072 312.46
   LOCATION L0000395     VOLUME   463436.063 3768288.042 312.57
   LOCATION L0000396     VOLUME   463439.721 3768288.012 312.69
   LOCATION L0000397     VOLUME   463443.378 3768287.982 312.80
   LOCATION L0000398     VOLUME   463447.036 3768287.952 312.92
   LOCATION L0000399     VOLUME   463450.693 3768287.922 313.00
   LOCATION L0000400     VOLUME   463454.351 3768287.892 313.00
   LOCATION L0000401     VOLUME   463458.008 3768287.862 313.00
   LOCATION L0000402     VOLUME   463461.666 3768287.832 313.00
   LOCATION L0000403     VOLUME   463465.323 3768287.802 313.00
   LOCATION L0000404     VOLUME   463468.981 3768287.772 313.00
   LOCATION L0000405     VOLUME   463472.638 3768287.742 313.00
   LOCATION L0000406     VOLUME   463476.296 3768287.712 313.00
   LOCATION L0000407     VOLUME   463479.953 3768287.682 313.00
   LOCATION L0000408     VOLUME   463483.611 3768287.652 313.00
   LOCATION L0000409     VOLUME   463487.268 3768287.622 313.00
   LOCATION L0000410     VOLUME   463490.926 3768287.592 313.00
   LOCATION L0000411     VOLUME   463494.583 3768287.562 313.00
   LOCATION L0000412     VOLUME   463498.241 3768287.532 313.00
   LOCATION L0000413     VOLUME   463501.898 3768287.502 313.00
   LOCATION L0000414     VOLUME   463505.555 3768287.472 313.00
   LOCATION L0000415     VOLUME   463509.213 3768287.442 313.00
   LOCATION L0000416     VOLUME   463512.870 3768287.412 313.00
   LOCATION L0000417     VOLUME   463516.528 3768287.382 313.00
   LOCATION L0000418     VOLUME   463520.185 3768287.352 313.00
   LOCATION L0000419     VOLUME   463523.843 3768287.322 313.00
   LOCATION L0000420     VOLUME   463527.500 3768287.292 313.00
   LOCATION L0000421     VOLUME   463531.158 3768287.262 313.00
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LOCATION L0000422 VOLUME 463534.815 3768287.232 313.00
LOCATION L0000423 VOLUME 463538.473 3768287.202 313.00
LOCATION L0000424 VOLUME 463542.130 3768287.172 313.00
LOCATION L0000425 VOLUME 463545.788 3768287.142 313.00
LOCATION L0000426 VOLUME 463549.445 3768287.112 313.00
LOCATION L0000427 VOLUME 463553.103 3768287.082 313.00
LOCATION L0000428 VOLUME 463556.760 3768287.052 313.00
LOCATION L0000429 VOLUME 463560.418 3768287.022 313.00
LOCATION L0000430 VOLUME 463564.075 3768286.992 313.00
LOCATION L0000431 VOLUME 463567.733 3768286.962 313.00
LOCATION L0000432 VOLUME 463571.390 3768286.932 313.00
LOCATION L0000433 VOLUME 463575.048 3768286.902 313.00
LOCATION L0000434 VOLUME 463578.705 3768286.872 313.00
LOCATION L0000435 VOLUME 463582.362 3768286.841 313.00
LOCATION L0000436 VOLUME 463586.020 3768286.811 313.00
LOCATION L0000437 VOLUME 463589.677 3768286.781 313.00
LOCATION L0000438 VOLUME 463593.335 3768286.751 313.00
LOCATION L0000439 VOLUME 463596.992 3768286.721 313.00
LOCATION L0000440 VOLUME 463600.650 3768286.691 313.00
LOCATION L0000441 VOLUME 463604.307 3768286.661 313.00
LOCATION L0000442 VOLUME 463607.679 3768286.913 313.00
LOCATION L0000443 VOLUME 463607.606 3768290.570 313.00
LOCATION L0000444 VOLUME 463607.532 3768294.227 313.00
LOCATION L0000445 VOLUME 463607.459 3768297.884 313.00
LOCATION L0000446 VOLUME 463607.385 3768301.541 313.00
LOCATION L0000447 VOLUME 463607.312 3768305.198 313.00
LOCATION L0000448 VOLUME 463607.238 3768308.855 313.00
LOCATION L0000449 VOLUME 463607.165 3768312.511 313.00
LOCATION L0000450 VOLUME 463607.091 3768316.168 313.00
LOCATION L0000451 VOLUME 463607.018 3768319.825 313.12
LOCATION L0000452 VOLUME 463606.944 3768323.482 313.24
LOCATION L0000453 VOLUME 463606.871 3768327.139 313.36
LOCATION L0000454 VOLUME 463606.797 3768330.796 313.48
LOCATION L0000455 VOLUME 463606.724 3768334.453 313.60
LOCATION L0000456 VOLUME 463606.650 3768338.109 313.73
LOCATION L0000457 VOLUME 463606.577 3768341.766 313.85
LOCATION L0000458 VOLUME 463606.503 3768345.423 313.97
LOCATION L0000459 VOLUME 463606.430 3768349.080 314.00
LOCATION L0000460 VOLUME 463606.356 3768352.737 314.00
LOCATION L0000461 VOLUME 463606.283 3768356.394 314.00
LOCATION L0000462 VOLUME 463606.209 3768360.051 314.00
LOCATION L0000463 VOLUME 463606.136 3768363.708 314.00
LOCATION L0000464 VOLUME 463606.062 3768367.364 314.00
LOCATION L0000465 VOLUME 463605.989 3768371.021 314.00
LOCATION L0000466 VOLUME 463605.915 3768374.678 314.00
LOCATION L0000467 VOLUME 463605.842 3768378.335 314.07
LOCATION L0000468 VOLUME 463605.768 3768381.992 314.19
LOCATION L0000469 VOLUME 463605.695 3768385.649 314.31
LOCATION L0000470 VOLUME 463605.621 3768389.306 314.43
LOCATION L0000471 VOLUME 463605.548 3768392.962 314.55
LOCATION L0000472 VOLUME 463605.474 3768396.619 314.68
LOCATION L0000473 VOLUME 463605.401 3768400.276 314.80
LOCATION L0000474 VOLUME 463605.327 3768403.933 314.92
LOCATION L0000475 VOLUME 463605.254 3768407.590 315.00

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   LOCATION L0000476     VOLUME   463605.180 3768411.247 315.00
   LOCATION L0000477     VOLUME   463605.107 3768414.904 315.00
   LOCATION L0000478     VOLUME   463605.033 3768418.560 315.00
** End of LINE VOLUME Source ID = RDONSITE
   LOCATION IDLE         POINT      463533.120  3768350.980      314.000
** DESCRSRC Idling - All Trucks
** Source Parameters **
** LINE VOLUME Source ID = RDCEDARN
   SRCPARAM L0000240     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000241     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000242     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000243     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000244     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000245     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000246     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000247     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000248     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000249     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000250     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000251     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000252     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000253     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000254     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000255     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000256     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000257     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000258     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000259     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000260     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000261     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000262     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000263     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000264     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000265     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000266     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000267     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000268     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000269     0.00000121      0.00      5.67      0.85
   SRCPARAM L0000270     0.00000121      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDCEDARM
   SRCPARAM L0000271     0.00000103      0.00      5.67      0.85
   SRCPARAM L0000272     0.00000103      0.00      5.67      0.85
   SRCPARAM L0000273     0.00000103      0.00      5.67      0.85
   SRCPARAM L0000274     0.00000103      0.00      5.67      0.85
   SRCPARAM L0000275     0.00000103      0.00      5.67      0.85
   SRCPARAM L0000276     0.00000103      0.00      5.67      0.85
   SRCPARAM L0000277     0.00000103      0.00      5.67      0.85
   SRCPARAM L0000278     0.00000103      0.00      5.67      0.85
   SRCPARAM L0000279     0.00000103      0.00      5.67      0.85
   SRCPARAM L0000280     0.00000103      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDCEDARS
   SRCPARAM L0000281     0.0000007763      0.00      5.67      0.85
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   SRCPARAM L0000282     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000283     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000284     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000285     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000286     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000287     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000288     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000289     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000290     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000291     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000292     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000293     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000294     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000295     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000296     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000297     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000298     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000299     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000300     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000301     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000302     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000303     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000304     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000305     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000306     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000307     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000308     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000309     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000310     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000311     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000312     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000313     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000314     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000315     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000316     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000317     0.0000007763      0.00      5.67      0.85
   SRCPARAM L0000318     0.0000007763      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDSANTAW
   SRCPARAM L0000319     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000320     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000321     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000322     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000323     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000324     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000325     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000326     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000327     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000328     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000329     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000330     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000331     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000332     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000333     0.0000005355      0.00      5.67      0.85
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   SRCPARAM L0000334     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000335     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000336     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000337     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000338     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000339     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000340     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000341     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000342     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000343     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000344     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000345     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000346     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000347     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000348     0.0000005355      0.00      5.67      0.85
   SRCPARAM L0000349     0.0000005355      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDSANTAM
   SRCPARAM L0000350     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000351     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000352     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000353     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000354     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000355     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000356     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000357     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000358     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000359     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000360     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000361     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000362     0.000001807       0.00      5.67      0.85
   SRCPARAM L0000363     0.000001807       0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDSANTAE
   SRCPARAM L0000364     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000365     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000366     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000367     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000368     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000369     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000370     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000371     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000372     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000373     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000374     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000375     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000376     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000377     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000378     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000379     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000380     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000381     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000382     0.000000306       0.00      5.67      0.85
   SRCPARAM L0000383     0.000000306       0.00      5.67      0.85
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   SRCPARAM L0000384     0.000000306      0.00      5.67      0.85
   SRCPARAM L0000385     0.000000306      0.00      5.67      0.85
   SRCPARAM L0000386     0.000000306      0.00      5.67      0.85
   SRCPARAM L0000387     0.000000306      0.00      5.67      0.85
   SRCPARAM L0000388     0.000000306      0.00      5.67      0.85
   SRCPARAM L0000389     0.000000306      0.00      5.67      0.85
   SRCPARAM L0000390     0.000000306      0.00      5.67      0.85
   SRCPARAM L0000391     0.000000306      0.00      5.67      0.85
   SRCPARAM L0000392     0.000000306      0.00      5.67      0.85
   SRCPARAM L0000393     0.000000306      0.00      5.67      0.85
** ----------------------------------------------------------------------
** LINE VOLUME Source ID = RDONSITE
   SRCPARAM L0000394     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000395     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000396     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000397     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000398     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000399     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000400     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000401     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000402     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000403     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000404     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000405     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000406     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000407     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000408     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000409     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000410     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000411     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000412     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000413     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000414     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000415     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000416     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000417     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000418     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000419     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000420     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000421     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000422     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000423     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000424     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000425     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000426     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000427     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000428     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000429     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000430     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000431     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000432     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000433     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000434     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000435     0.0000009788      0.00      1.70      0.85
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   SRCPARAM L0000436     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000437     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000438     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000439     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000440     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000441     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000442     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000443     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000444     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000445     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000446     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000447     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000448     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000449     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000450     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000451     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000452     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000453     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000454     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000455     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000456     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000457     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000458     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000459     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000460     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000461     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000462     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000463     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000464     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000465     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000466     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000467     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000468     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000469     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000470     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000471     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000472     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000473     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000474     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000475     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000476     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000477     0.0000009788      0.00      1.70      0.85
   SRCPARAM L0000478     0.0000009788      0.00      1.70      0.85
** ------------------------------------------------------------------
   SRCPARAM IDLE          0.000247     3.840   366.000  50.00000
0.100
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
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**
RE STARTING
   INCLUDED TAC2024.rou
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\FONT_V9_ADJU\FONT_v9.SFC
   PROFFILE ..\FONT_V9_ADJU\FONT_v9.PFL
   SURFDATA 3102 2011 Fontana
   UAIRDATA 3190 2011
   SITEDATA 99999 2011
   PROFBASE 367.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST TAC2024.AD\24H1GALL.PLT 31
   PLOTFILE ANNUAL ALL TAC2024.AD\AN00GALL.PLT 32
   SUMMFILE TAC2024.sum
OU FINISHED
**
****************************************
** Project Parameters
****************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS    m
** ZONE     11
** ZONEINX  0
**
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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.9.0
** Lakes Environmental Software Inc.
** Date: 7/20/2020
** File: C:\Vista Env\2019\19106 Bloomington\AERMOD\TAC2039\TAC2039.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE Bloomington Commercial Center  DPM 2039 - 2050
   MODELOPT DFAULT CONC
   AVERTIME 24 ANNUAL
   URBANOPT 2035210 San_Bernardino_County
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL TAC2039.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** ------------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDCEDARN
** DESCRSRC Cedar Ave north of Santa Ana Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000359
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 463414.727, 3768433.166, 315.03, 0.00, 5.67
** 463416.416, 3768805.396, 319.96, 0.00, 5.67
** ------------------------------------------------------------------------
   LOCATION L0000240     VOLUME   463414.755 3768439.262 315.10
   LOCATION L0000241     VOLUME   463414.810 3768451.454 315.50
   LOCATION L0000242     VOLUME   463414.865 3768463.645 315.91
   LOCATION L0000243     VOLUME   463414.921 3768475.837 316.00
   LOCATION L0000244     VOLUME   463414.976 3768488.029 316.00
```

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   LOCATION L0000245     VOLUME   463415.031 3768500.221 316.00
   LOCATION L0000246     VOLUME   463415.087 3768512.413 316.00
   LOCATION L0000247     VOLUME   463415.142 3768524.605 316.00
   LOCATION L0000248     VOLUME   463415.197 3768536.797 316.30
   LOCATION L0000249     VOLUME   463415.253 3768548.989 316.64
   LOCATION L0000250     VOLUME   463415.308 3768561.180 316.88
   LOCATION L0000251     VOLUME   463415.363 3768573.372 316.94
   LOCATION L0000252     VOLUME   463415.419 3768585.564 317.00
   LOCATION L0000253     VOLUME   463415.474 3768597.756 317.00
   LOCATION L0000254     VOLUME   463415.529 3768609.948 317.00
   LOCATION L0000255     VOLUME   463415.585 3768622.140 317.00
   LOCATION L0000256     VOLUME   463415.640 3768634.332 317.00
   LOCATION L0000257     VOLUME   463415.695 3768646.524 317.01
   LOCATION L0000258     VOLUME   463415.751 3768658.715 317.36
   LOCATION L0000259     VOLUME   463415.806 3768670.907 317.71
   LOCATION L0000260     VOLUME   463415.861 3768683.099 317.90
   LOCATION L0000261     VOLUME   463415.917 3768695.291 317.95
   LOCATION L0000262     VOLUME   463415.972 3768707.483 318.04
   LOCATION L0000263     VOLUME   463416.027 3768719.675 318.44
   LOCATION L0000264     VOLUME   463416.083 3768731.867 318.85
   LOCATION L0000265     VOLUME   463416.138 3768744.058 319.00
   LOCATION L0000266     VOLUME   463416.193 3768756.250 319.00
   LOCATION L0000267     VOLUME   463416.249 3768768.442 319.07
   LOCATION L0000268     VOLUME   463416.304 3768780.634 319.48
   LOCATION L0000269     VOLUME   463416.359 3768792.826 319.88
   LOCATION L0000270     VOLUME   463416.415 3768805.018 320.29
** End of LINE VOLUME Source ID = RDCEDARN
** ----------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDCEDARM
** DESCRSRC Cedar Ave south of Santa Ana Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 9.88E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 463415.239, 3768416.590, 314.95, 0.00, 5.67
** 463415.503, 3768290.751, 312.02, 0.00, 5.67
** ----------------------------------------------------------------
   LOCATION L0000271     VOLUME   463415.252 3768410.494 315.00
   LOCATION L0000272     VOLUME   463415.277 3768398.302 314.73
   LOCATION L0000273     VOLUME   463415.303 3768386.110 314.33
   LOCATION L0000274     VOLUME   463415.328 3768373.918 314.00
   LOCATION L0000275     VOLUME   463415.354 3768361.726 314.00
   LOCATION L0000276     VOLUME   463415.380 3768349.534 314.00
   LOCATION L0000277     VOLUME   463415.405 3768337.342 313.70
   LOCATION L0000278     VOLUME   463415.431 3768325.150 313.29
   LOCATION L0000279     VOLUME   463415.456 3768312.958 312.89
   LOCATION L0000280     VOLUME   463415.482 3768300.766 312.48
** End of LINE VOLUME Source ID = RDCEDARM
** ----------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
```

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** LINE VOLUME Source ID = RDCEDARS
** DESCRSRC Cedar Ave south of Project DW #1
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000282
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 463415.796, 3768282.694, 312.03, 0.00, 5.67
** 463414.953, 3767815.577, 306.90, 0.00, 5.67
** ------------------------------------------------------------------
   LOCATION L0000281     VOLUME   463415.785 3768276.598 312.00
   LOCATION L0000282     VOLUME   463415.763 3768264.406 312.00
   LOCATION L0000283     VOLUME   463415.741 3768252.214 311.86
   LOCATION L0000284     VOLUME   463415.719 3768240.022 311.46
   LOCATION L0000285     VOLUME   463415.697 3768227.830 311.05
   LOCATION L0000286     VOLUME   463415.675 3768215.638 311.00
   LOCATION L0000287     VOLUME   463415.653 3768203.446 311.00
   LOCATION L0000288     VOLUME   463415.631 3768191.254 311.00
   LOCATION L0000289     VOLUME   463415.609 3768179.062 311.00
   LOCATION L0000290     VOLUME   463415.587 3768166.870 311.00
   LOCATION L0000291     VOLUME   463415.565 3768154.678 310.61
   LOCATION L0000292     VOLUME   463415.543 3768142.486 310.20
   LOCATION L0000293     VOLUME   463415.521 3768130.294 310.00
   LOCATION L0000294     VOLUME   463415.499 3768118.102 310.00
   LOCATION L0000295     VOLUME   463415.477 3768105.910 310.00
   LOCATION L0000296     VOLUME   463415.455 3768093.718 310.00
   LOCATION L0000297     VOLUME   463415.433 3768081.527 310.00
   LOCATION L0000298     VOLUME   463415.411 3768069.335 310.00
   LOCATION L0000299     VOLUME   463415.389 3768057.143 310.00
   LOCATION L0000300     VOLUME   463415.367 3768044.951 309.95
   LOCATION L0000301     VOLUME   463415.345 3768032.759 309.55
   LOCATION L0000302     VOLUME   463415.323 3768020.567 309.14
   LOCATION L0000303     VOLUME   463415.301 3768008.375 309.00
   LOCATION L0000304     VOLUME   463415.279 3767996.183 309.00
   LOCATION L0000305     VOLUME   463415.257 3767983.991 309.00
   LOCATION L0000306     VOLUME   463415.235 3767971.799 309.00
   LOCATION L0000307     VOLUME   463415.213 3767959.607 309.00
   LOCATION L0000308     VOLUME   463415.191 3767947.415 309.00
   LOCATION L0000309     VOLUME   463415.169 3767935.223 309.00
   LOCATION L0000310     VOLUME   463415.147 3767923.031 308.89
   LOCATION L0000311     VOLUME   463415.125 3767910.839 308.48
   LOCATION L0000312     VOLUME   463415.103 3767898.647 308.08
   LOCATION L0000313     VOLUME   463415.081 3767886.455 307.72
   LOCATION L0000314     VOLUME   463415.059 3767874.263 307.38
   LOCATION L0000315     VOLUME   463415.037 3767862.071 307.13
   LOCATION L0000316     VOLUME   463415.015 3767849.879 307.07
   LOCATION L0000317     VOLUME   463414.993 3767837.687 307.01
   LOCATION L0000318     VOLUME   463414.971 3767825.495 307.00
** End of LINE VOLUME Source ID = RDCEDARS
** ------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDSANTAW
```

```
** DESCRSRC Santa Ana Ave west of Cedar Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000158
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 463403.005, 3768425.077, 315.00, 0.00, 5.67
** 463229.069, 3768427.239, 315.05, 0.00, 5.67
** 463027.735, 3768431.316, 316.00, 0.00, 5.67
** ----------------------------------------------------------------------
   LOCATION L0000319     VOLUME   463396.909 3768425.153 315.00
   LOCATION L0000320     VOLUME   463384.718 3768425.305 315.00
   LOCATION L0000321     VOLUME   463372.527 3768425.456 315.00
   LOCATION L0000322     VOLUME   463360.336 3768425.608 315.00
   LOCATION L0000323     VOLUME   463348.145 3768425.759 315.00
   LOCATION L0000324     VOLUME   463335.954 3768425.911 315.00
   LOCATION L0000325     VOLUME   463323.763 3768426.062 315.00
   LOCATION L0000326     VOLUME   463311.572 3768426.214 315.00
   LOCATION L0000327     VOLUME   463299.381 3768426.365 315.00
   LOCATION L0000328     VOLUME   463287.190 3768426.517 315.00
   LOCATION L0000329     VOLUME   463274.998 3768426.669 315.00
   LOCATION L0000330     VOLUME   463262.807 3768426.820 315.00
   LOCATION L0000331     VOLUME   463250.616 3768426.972 315.00
   LOCATION L0000332     VOLUME   463238.425 3768427.123 315.00
   LOCATION L0000333     VOLUME   463226.235 3768427.297 315.00
   LOCATION L0000334     VOLUME   463214.045 3768427.544 315.00
   LOCATION L0000335     VOLUME   463201.856 3768427.790 315.19
   LOCATION L0000336     VOLUME   463189.666 3768428.037 315.48
   LOCATION L0000337     VOLUME   463177.477 3768428.284 315.73
   LOCATION L0000338     VOLUME   463165.287 3768428.531 315.74
   LOCATION L0000339     VOLUME   463153.098 3768428.778 315.75
   LOCATION L0000340     VOLUME   463140.908 3768429.024 315.76
   LOCATION L0000341     VOLUME   463128.719 3768429.271 315.76
   LOCATION L0000342     VOLUME   463116.529 3768429.518 315.80
   LOCATION L0000343     VOLUME   463104.340 3768429.765 315.89
   LOCATION L0000344     VOLUME   463092.150 3768430.012 315.98
   LOCATION L0000345     VOLUME   463079.961 3768430.258 316.00
   LOCATION L0000346     VOLUME   463067.771 3768430.505 316.00
   LOCATION L0000347     VOLUME   463055.582 3768430.752 316.00
   LOCATION L0000348     VOLUME   463043.392 3768430.999 316.00
   LOCATION L0000349     VOLUME   463031.203 3768431.246 316.00
** End of LINE VOLUME Source ID = RDSANTAW
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDSANTAM
** DESCRSRC Santa Ana Ave east of Cedar Ave
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 0.0000242
** Vertical Dimension = 1.83
** SZINIT = 0.85
```

```
** Nodes = 2
** 463426.168, 3768425.210, 315.13, 0.00, 5.67
** 463593.391, 3768427.417, 315.00, 0.00, 5.67
** ----------------------------------------------------------------------
   LOCATION L0000350     VOLUME   463432.264 3768425.291 315.27
   LOCATION L0000351     VOLUME   463444.454 3768425.452 315.53
   LOCATION L0000352     VOLUME   463456.645 3768425.613 315.64
   LOCATION L0000353     VOLUME   463468.836 3768425.774 315.65
   LOCATION L0000354     VOLUME   463481.027 3768425.934 315.65
   LOCATION L0000355     VOLUME   463493.218 3768426.095 315.66
   LOCATION L0000356     VOLUME   463505.409 3768426.256 315.66
   LOCATION L0000357     VOLUME   463517.600 3768426.417 315.67
   LOCATION L0000358     VOLUME   463529.791 3768426.578 315.67
   LOCATION L0000359     VOLUME   463541.982 3768426.739 315.63
   LOCATION L0000360     VOLUME   463554.173 3768426.900 315.35
   LOCATION L0000361     VOLUME   463566.364 3768427.061 315.08
   LOCATION L0000362     VOLUME   463578.555 3768427.221 315.00
   LOCATION L0000363     VOLUME   463590.746 3768427.382 315.00
** End of LINE VOLUME Source ID = RDSANTAM
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDSANTAE
** DESCRSRC Santa Ana Ave east of Project DW #3
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 8.78E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 463612.901, 3768428.869, 315.00, 0.00, 5.67
** 463738.671, 3768429.839, 314.04, 0.00, 5.67
** 463977.071, 3768425.518, 312.06, 0.00, 5.67
** ----------------------------------------------------------------------
   LOCATION L0000364     VOLUME   463618.996 3768428.916 315.00
   LOCATION L0000365     VOLUME   463631.188 3768429.010 314.99
   LOCATION L0000366     VOLUME   463643.380 3768429.104 314.89
   LOCATION L0000367     VOLUME   463655.571 3768429.198 314.79
   LOCATION L0000368     VOLUME   463667.763 3768429.292 314.76
   LOCATION L0000369     VOLUME   463679.955 3768429.386 314.77
   LOCATION L0000370     VOLUME   463692.146 3768429.480 314.71
   LOCATION L0000371     VOLUME   463704.338 3768429.574 314.40
   LOCATION L0000372     VOLUME   463716.530 3768429.668 314.08
   LOCATION L0000373     VOLUME   463728.721 3768429.762 314.00
   LOCATION L0000374     VOLUME   463740.913 3768429.798 314.00
   LOCATION L0000375     VOLUME   463753.103 3768429.577 314.00
   LOCATION L0000376     VOLUME   463765.293 3768429.356 314.00
   LOCATION L0000377     VOLUME   463777.483 3768429.135 314.00
   LOCATION L0000378     VOLUME   463789.673 3768428.914 313.92
   LOCATION L0000379     VOLUME   463801.863 3768428.694 313.81
   LOCATION L0000380     VOLUME   463814.053 3768428.473 313.63
   LOCATION L0000381     VOLUME   463826.243 3768428.252 313.33
   LOCATION L0000382     VOLUME   463838.433 3768428.031 313.03
   LOCATION L0000383     VOLUME   463850.623 3768427.810 313.00
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   LOCATION L0000384     VOLUME   463862.813 3768427.589 313.00
   LOCATION L0000385     VOLUME   463875.003 3768427.368 313.00
   LOCATION L0000386     VOLUME   463887.193 3768427.147 313.00
   LOCATION L0000387     VOLUME   463899.383 3768426.926 313.00
   LOCATION L0000388     VOLUME   463911.573 3768426.705 313.00
   LOCATION L0000389     VOLUME   463923.763 3768426.484 313.00
   LOCATION L0000390     VOLUME   463935.953 3768426.264 312.79
   LOCATION L0000391     VOLUME   463948.143 3768426.043 312.38
   LOCATION L0000392     VOLUME   463960.333 3768425.822 312.00
   LOCATION L0000393     VOLUME   463972.523 3768425.601 312.00
** End of LINE VOLUME Source ID = RDSANTAE
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDONSITE
** DESCRSRC Onsite between DW #1 and DW #3
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 0.000073
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 463430.577, 3768288.087, 312.20, 0.00, 1.70
** 463607.685, 3768286.634, 313.00, 0.00, 1.70
** 463605.024, 3768419.033, 314.94, 0.00, 1.70
** ----------------------------------------------------------------------
   LOCATION L0000394     VOLUME   463432.406 3768288.072 312.46
   LOCATION L0000395     VOLUME   463436.063 3768288.042 312.57
   LOCATION L0000396     VOLUME   463439.721 3768288.012 312.69
   LOCATION L0000397     VOLUME   463443.378 3768287.982 312.80
   LOCATION L0000398     VOLUME   463447.036 3768287.952 312.92
   LOCATION L0000399     VOLUME   463450.693 3768287.922 313.00
   LOCATION L0000400     VOLUME   463454.351 3768287.892 313.00
   LOCATION L0000401     VOLUME   463458.008 3768287.862 313.00
   LOCATION L0000402     VOLUME   463461.666 3768287.832 313.00
   LOCATION L0000403     VOLUME   463465.323 3768287.802 313.00
   LOCATION L0000404     VOLUME   463468.981 3768287.772 313.00
   LOCATION L0000405     VOLUME   463472.638 3768287.742 313.00
   LOCATION L0000406     VOLUME   463476.296 3768287.712 313.00
   LOCATION L0000407     VOLUME   463479.953 3768287.682 313.00
   LOCATION L0000408     VOLUME   463483.611 3768287.652 313.00
   LOCATION L0000409     VOLUME   463487.268 3768287.622 313.00
   LOCATION L0000410     VOLUME   463490.926 3768287.592 313.00
   LOCATION L0000411     VOLUME   463494.583 3768287.562 313.00
   LOCATION L0000412     VOLUME   463498.241 3768287.532 313.00
   LOCATION L0000413     VOLUME   463501.898 3768287.502 313.00
   LOCATION L0000414     VOLUME   463505.555 3768287.472 313.00
   LOCATION L0000415     VOLUME   463509.213 3768287.442 313.00
   LOCATION L0000416     VOLUME   463512.870 3768287.412 313.00
   LOCATION L0000417     VOLUME   463516.528 3768287.382 313.00
   LOCATION L0000418     VOLUME   463520.185 3768287.352 313.00
   LOCATION L0000419     VOLUME   463523.843 3768287.322 313.00
   LOCATION L0000420     VOLUME   463527.500 3768287.292 313.00
   LOCATION L0000421     VOLUME   463531.158 3768287.262 313.00
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LOCATION L0000422 VOLUME 463534.815 3768287.232 313.00
LOCATION L0000423 VOLUME 463538.473 3768287.202 313.00
LOCATION L0000424 VOLUME 463542.130 3768287.172 313.00
LOCATION L0000425 VOLUME 463545.788 3768287.142 313.00
LOCATION L0000426 VOLUME 463549.445 3768287.112 313.00
LOCATION L0000427 VOLUME 463553.103 3768287.082 313.00
LOCATION L0000428 VOLUME 463556.760 3768287.052 313.00
LOCATION L0000429 VOLUME 463560.418 3768287.022 313.00
LOCATION L0000430 VOLUME 463564.075 3768286.992 313.00
LOCATION L0000431 VOLUME 463567.733 3768286.962 313.00
LOCATION L0000432 VOLUME 463571.390 3768286.932 313.00
LOCATION L0000433 VOLUME 463575.048 3768286.902 313.00
LOCATION L0000434 VOLUME 463578.705 3768286.872 313.00
LOCATION L0000435 VOLUME 463582.362 3768286.841 313.00
LOCATION L0000436 VOLUME 463586.020 3768286.811 313.00
LOCATION L0000437 VOLUME 463589.677 3768286.781 313.00
LOCATION L0000438 VOLUME 463593.335 3768286.751 313.00
LOCATION L0000439 VOLUME 463596.992 3768286.721 313.00
LOCATION L0000440 VOLUME 463600.650 3768286.691 313.00
LOCATION L0000441 VOLUME 463604.307 3768286.661 313.00
LOCATION L0000442 VOLUME 463607.679 3768286.913 313.00
LOCATION L0000443 VOLUME 463607.606 3768290.570 313.00
LOCATION L0000444 VOLUME 463607.532 3768294.227 313.00
LOCATION L0000445 VOLUME 463607.459 3768297.884 313.00
LOCATION L0000446 VOLUME 463607.385 3768301.541 313.00
LOCATION L0000447 VOLUME 463607.312 3768305.198 313.00
LOCATION L0000448 VOLUME 463607.238 3768308.855 313.00
LOCATION L0000449 VOLUME 463607.165 3768312.511 313.00
LOCATION L0000450 VOLUME 463607.091 3768316.168 313.00
LOCATION L0000451 VOLUME 463607.018 3768319.825 313.12
LOCATION L0000452 VOLUME 463606.944 3768323.482 313.24
LOCATION L0000453 VOLUME 463606.871 3768327.139 313.36
LOCATION L0000454 VOLUME 463606.797 3768330.796 313.48
LOCATION L0000455 VOLUME 463606.724 3768334.453 313.60
LOCATION L0000456 VOLUME 463606.650 3768338.109 313.73
LOCATION L0000457 VOLUME 463606.577 3768341.766 313.85
LOCATION L0000458 VOLUME 463606.503 3768345.423 313.97
LOCATION L0000459 VOLUME 463606.430 3768349.080 314.00
LOCATION L0000460 VOLUME 463606.356 3768352.737 314.00
LOCATION L0000461 VOLUME 463606.283 3768356.394 314.00
LOCATION L0000462 VOLUME 463606.209 3768360.051 314.00
LOCATION L0000463 VOLUME 463606.136 3768363.708 314.00
LOCATION L0000464 VOLUME 463606.062 3768367.364 314.00
LOCATION L0000465 VOLUME 463605.989 3768371.021 314.00
LOCATION L0000466 VOLUME 463605.915 3768374.678 314.00
LOCATION L0000467 VOLUME 463605.842 3768378.335 314.07
LOCATION L0000468 VOLUME 463605.768 3768381.992 314.19
LOCATION L0000469 VOLUME 463605.695 3768385.649 314.31
LOCATION L0000470 VOLUME 463605.621 3768389.306 314.43
LOCATION L0000471 VOLUME 463605.548 3768392.962 314.55
LOCATION L0000472 VOLUME 463605.474 3768396.619 314.68
LOCATION L0000473 VOLUME 463605.401 3768400.276 314.80
LOCATION L0000474 VOLUME 463605.327 3768403.933 314.92
LOCATION L0000475 VOLUME 463605.254 3768407.590 315.00

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   LOCATION L0000476     VOLUME   463605.180 3768411.247 315.00
   LOCATION L0000477     VOLUME   463605.107 3768414.904 315.00
   LOCATION L0000478     VOLUME   463605.033 3768418.560 315.00
** End of LINE VOLUME Source ID = RDONSITE
   LOCATION IDLE         POINT      463533.120  3768350.980      314.000
** DESCRSRC Idling - All Trucks
** Source Parameters **
** LINE VOLUME Source ID = RDCEDARN
   SRCPARAM L0000240     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000241     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000242     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000243     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000244     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000245     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000246     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000247     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000248     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000249     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000250     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000251     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000252     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000253     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000254     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000255     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000256     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000257     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000258     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000259     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000260     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000261     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000262     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000263     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000264     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000265     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000266     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000267     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000268     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000269     0.000001158      0.00      5.67      0.85
   SRCPARAM L0000270     0.000001158      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDCEDARM
   SRCPARAM L0000271     0.000000988      0.00      5.67      0.85
   SRCPARAM L0000272     0.000000988      0.00      5.67      0.85
   SRCPARAM L0000273     0.000000988      0.00      5.67      0.85
   SRCPARAM L0000274     0.000000988      0.00      5.67      0.85
   SRCPARAM L0000275     0.000000988      0.00      5.67      0.85
   SRCPARAM L0000276     0.000000988      0.00      5.67      0.85
   SRCPARAM L0000277     0.000000988      0.00      5.67      0.85
   SRCPARAM L0000278     0.000000988      0.00      5.67      0.85
   SRCPARAM L0000279     0.000000988      0.00      5.67      0.85
   SRCPARAM L0000280     0.000000988      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDCEDARS
   SRCPARAM L0000281     0.0000007421      0.00      5.67      0.85
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   SRCPARAM L0000282     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000283     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000284     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000285     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000286     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000287     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000288     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000289     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000290     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000291     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000292     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000293     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000294     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000295     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000296     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000297     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000298     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000299     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000300     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000301     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000302     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000303     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000304     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000305     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000306     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000307     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000308     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000309     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000310     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000311     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000312     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000313     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000314     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000315     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000316     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000317     0.0000007421      0.00      5.67      0.85
   SRCPARAM L0000318     0.0000007421      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDSANTAW
   SRCPARAM L0000319     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000320     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000321     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000322     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000323     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000324     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000325     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000326     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000327     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000328     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000329     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000330     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000331     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000332     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000333     0.0000005097      0.00      5.67      0.85
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   SRCPARAM L0000334     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000335     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000336     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000337     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000338     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000339     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000340     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000341     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000342     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000343     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000344     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000345     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000346     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000347     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000348     0.0000005097      0.00      5.67      0.85
   SRCPARAM L0000349     0.0000005097      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDSANTAM
   SRCPARAM L0000350     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000351     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000352     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000353     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000354     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000355     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000356     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000357     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000358     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000359     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000360     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000361     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000362     0.000001729      0.00      5.67      0.85
   SRCPARAM L0000363     0.000001729      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDSANTAE
   SRCPARAM L0000364     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000365     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000366     0.0000002927      0.00      5.67      0.85
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   SRCPARAM L0000368     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000369     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000370     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000371     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000372     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000373     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000374     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000375     0.0000002927      0.00      5.67      0.85
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   SRCPARAM L0000377     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000378     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000379     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000380     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000381     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000382     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000383     0.0000002927      0.00      5.67      0.85
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   SRCPARAM L0000384     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000385     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000386     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000387     0.0000002927      0.00      5.67      0.85
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   SRCPARAM L0000390     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000391     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000392     0.0000002927      0.00      5.67      0.85
   SRCPARAM L0000393     0.0000002927      0.00      5.67      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDONSITE
   SRCPARAM L0000394     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000395     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000396     0.0000008588      0.00      1.70      0.85
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   SRCPARAM L0000399     0.0000008588      0.00      1.70      0.85
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   SRCPARAM L0000418     0.0000008588      0.00      1.70      0.85
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   SRCPARAM L0000423     0.0000008588      0.00      1.70      0.85
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   SRCPARAM L0000425     0.0000008588      0.00      1.70      0.85
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   SRCPARAM L0000427     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000428     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000429     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000430     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000431     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000432     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000433     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000434     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000435     0.0000008588      0.00      1.70      0.85
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   SRCPARAM L0000436     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000437     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000438     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000439     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000440     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000441     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000442     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000443     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000444     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000445     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000446     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000447     0.0000008588      0.00      1.70      0.85
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   SRCPARAM L0000451     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000452     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000453     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000454     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000455     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000456     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000457     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000458     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000459     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000460     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000461     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000462     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000463     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000464     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000465     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000466     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000467     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000468     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000469     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000470     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000471     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000472     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000473     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000474     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000475     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000476     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000477     0.0000008588      0.00      1.70      0.85
   SRCPARAM L0000478     0.0000008588      0.00      1.70      0.85
** ------------------------------------------------------------------
   SRCPARAM IDLE          0.000237     3.840   366.000  50.00000
0.100
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
```

```
**
RE STARTING
   INCLUDED TAC2039.rou
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\FONT_V9_ADJU\FONT_v9.SFC
   PROFFILE ..\FONT_V9_ADJU\FONT_v9.PFL
   SURFDATA 3102 2011 Fontana
   UAIRDATA 3190 2011
   SITEDATA 99999 2011
   PROFBASE 367.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST TAC2039.AD\24H1GALL.PLT 31
   PLOTFILE ANNUAL ALL TAC2039.AD\AN00GALL.PLT 32
   SUMMFILE TAC2039.sum
OU FINISHED
**
****************************************
** Project Parameters
****************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS    m
** ZONE     11
** ZONEINX  0
**
```