Initial Study PROJ-2024-00004
Vernaci Properties
APNs 0230-101-012, 0230-101-013, 0230-101-014, 0230-101-034
April 2026

Appendix A: Air, Energy., Greenhouse Gas Emissions and Health Risk Report

AIR QUALITY, ENERGY, GREENHOUSE GAS EMISSIONS AND HEALTH RISK ASSESSMENT IMPACT ANALYSIS

WHITTRAM AVENUE TRUCK TRAILER PARKING PROJECT

COUNTY OF SAN BERNARDINO

Lead Agency:

County of San Bernardino
385 North Arrowhead Avenue
1st floor
San Bernardino, CA 92415

Prepared by:

Vista Environmental
1021 Didrickson Way
Laguna Beach, CA 92651
949 510 5355
Greg Tonkovich, AICP

Project No. 23038

November 30, 2023

TABLE OF CONTENTS

TABLE OF CONTENTS CONTINUED

LIST OF FIGURES

LIST OF TABLES

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
Air Basin	South Coast Air Basin
ACF	Advanced Clean Fleets Regulations
ACT	Advances Clean Trucks Regulations
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
BSFC	Brake Specific Fuel Consumption
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
Cf_4	tetrafluoromethane
C_2F_6	hexafluoroethane
CH_4	Methane
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
County	County of San Bernardino
DPM	Diesel particulate matter
EPA	Environmental Protection Agency
ºF	Fahrenheit
FTIP	Federal Transportation Improvement Program
GHG	Greenhouse gas
GWP	Global warming potential
HAP	Hazardous Air Pollutants
HFCs	Hydrofluorocarbons
IPCC	International Panel on Climate Change

kWhr	kilowatt-hour
LCFS	Low Carbon Fuel Standard
LST	Localized Significant Thresholds
MATES	Multiple Air Toxics Exposure Study
$MMTCO_2e$	Million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
MWh	Megawatt-hour
NAAQS	National Ambient Air Quality Standards
NO_x	Nitrogen oxides
NO_2	Nitrogen dioxide
OPR	Office of Planning and Research
Pfc	Perfluorocarbons
PM	Particle matter
PM10	Particles that are less than 10 micrometers in diameter
PM2.5	Particles that are less than 2.5 micrometers in diameter
PPM	Parts per million
PPB	Parts per billion
PPT	Parts per trillion
RTIP	Regional Transportation Improvement Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCAG	Southern California Association of Governments
SF_6	Sulfur Hexafluoride
SIP	State Implementation Plan
SO_x	Sulfur oxides
TAC	Toxic air contaminants
UNFCCC	United Nations' Framework Convention on Climate Change
VOC	Volatile organic compounds

1.0 INTRODUCTION

1.1 Purpose of Analysis and Study Objectives

This Air Quality, Energy, Greenhouse Gas (GHG) Emissions and Health Risk Assessment (HRA) Impact Analysis has been completed to determine the air quality, energy, GHG emissions and HRA impacts associated with the proposed Whittram Avenue Truck Trailer Parking Warehouse project (proposed project). The following is provided in this report:

- A description of the proposed project;
- A description of the atmospheric setting;
- A description of the criteria pollutants and GHGs;
- A description of the air quality regulatory framework;
- A description of the energy conservation regulatory framework;
- A description of the GHG emissions regulatory framework;
- A description of the air quality, energy, and GHG emissions thresholds including the California Environmental Quality Act (CEQA) significance thresholds;
- An analysis of the consistency of the proposed project with the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP);
- An analysis of the short-term construction related and long-term operational air quality, energy, and GHG emissions impacts;
- An analysis of the cancer and non-cancer risks (acute and chronic) from Toxic Air Contaminant (TAC) emissions; and
- An analysis of the consistency of the proposed project with all applicable energy and GHG emissions reduction plans and policies.

1.2 Site Location and Study Area

The project site is located in an unincorporated area of San Bernardino County (County). The approximately 5.22-acre project site is currently mostly vacant except for four structures that total approximately 3,600 square feet of building space in the southwest corner of the project site. The project site is bounded by two single-family homes located adjacent to the north and west sides of the project site. In addition, there are industrial uses to the north, Banana Avenue and industrial uses to the east, Whittram Avenue and a detention basin to the south, and Calabash Avenue and industrial uses to the west. The project local study area is shown in Figure 1.

Sensitive Receptors in Project Vicinity

The nearest sensitive receptors to the project site are residents at the single-family homes located as near as seven feet northwest of the project site. There are also additional homes interspersed with industrial uses along Calabash Avenue, north of the project site. In addition, there is a small mobile home park located as near as 900 feet east of the project site. The nearest school is Almond Elementary School that is located as near as 0.6 mile north of the project site.

1.3 Proposed Project Description

The proposed project consists of demolition of the existing structures on the project site and construction of a truck trailer storage yard with 156 spaces for truck trailers and 11 spaces for tractor rigs. There would also be 3,000 square foot office building located on the eastern portion of the project site and a 4,500 square foot maintenance shop located west of the office building and a 17 space auto parking lot would be located between the two structures. Approximately 39,290 square feet of the project site would be landscaped, with most landscaping located around the perimeter of the project site. The proposed site plan is shown in Figure 2.

1.4 Executive Summary

Standard Air Quality, Energy, and GHG Regulatory Conditions

The proposed project will be required to comply with the following regulatory conditions from the SCAQMD and State of California (State).

South Coast Air Quality Management District Rules

The following lists the SCAQMD rules that are applicable, but not limited to the proposed project.

- Rule 402 Nuisance – Controls the emissions of odors and other air contaminants;
- Rule 403 Fugitive Dust – Controls the emissions of fugitive dust;
- Rules 1108 and 1108.1 Cutback and Emulsified Asphalt – Controls the VOC content in asphalt;
- Rule 1113 Architectural Coatings – Controls the VOC content in paints and solvents;
- Rule 1143 Paint Thinners – Controls the VOC content in paint thinners;
- Rule 1403 Asbestos Removal – Regulates asbestos emissions from demolition activities.

State of California Rules

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

- CCR Title 13, Article 4.8, Chapter 9, Section 2449 – In use Off-Road Diesel Vehicles;
- CCR Title 13, Section 2025 – On-Road Diesel Truck Fleets;
- CCR Title 24 Part 6 – California Building Energy Standards; and
- CCR Title 24 Part 11 – California Green Building Standards.

Summary of Analysis Results

The following is a summary of the proposed project's impacts with regard to the State CEQA Guidelines air quality, energy, and GHG emissions checklist questions.

Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact.

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?

Less than significant impact.

Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact.

Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than significant impact.

Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;

Less than significant impact.

Conflict with or obstruct a state or local plan for renewable energy;

Less than significant impact.

Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

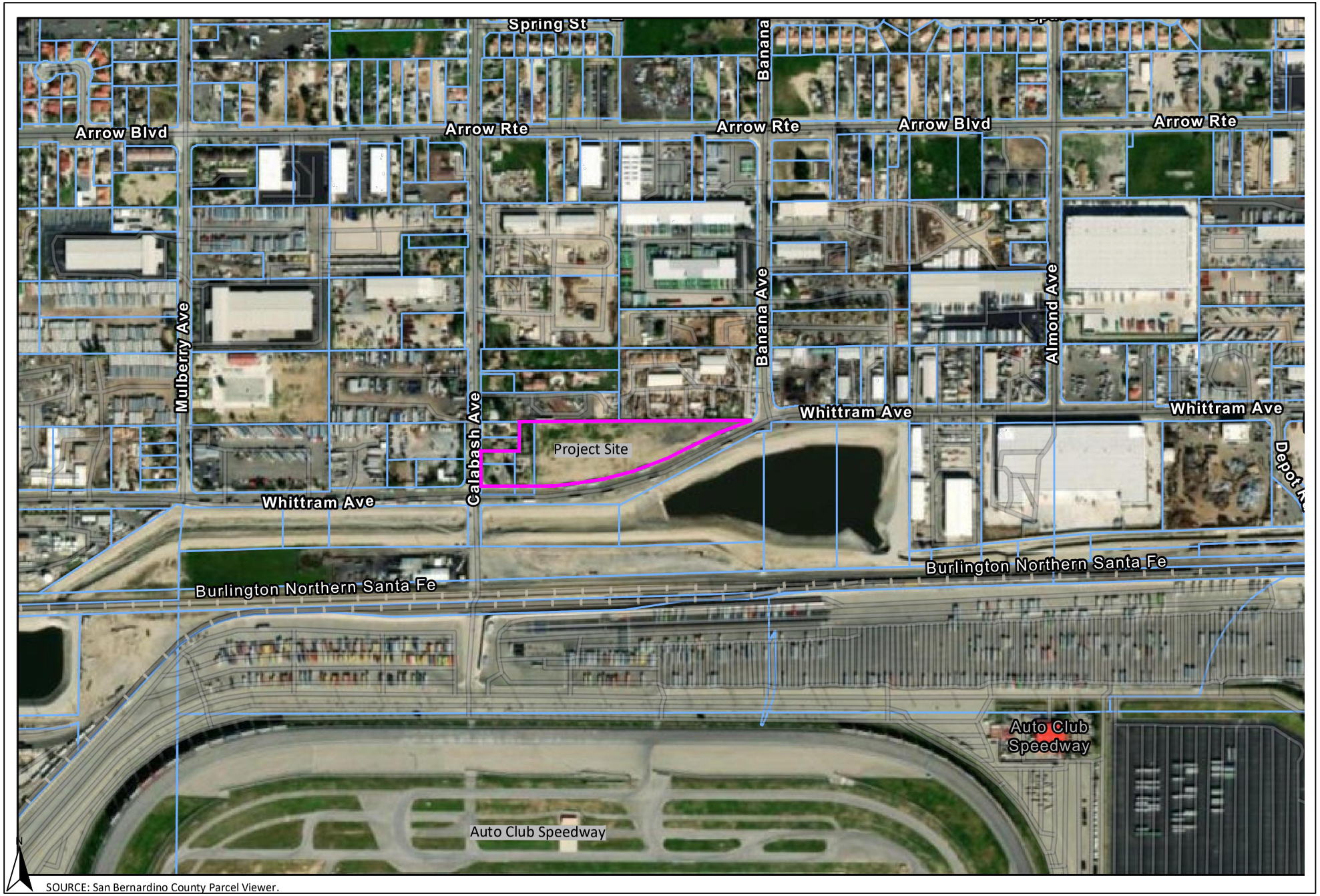
Less than significant impact.

Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

Less than significant impact.

1.5 Mitigation Measures for the Proposed Project

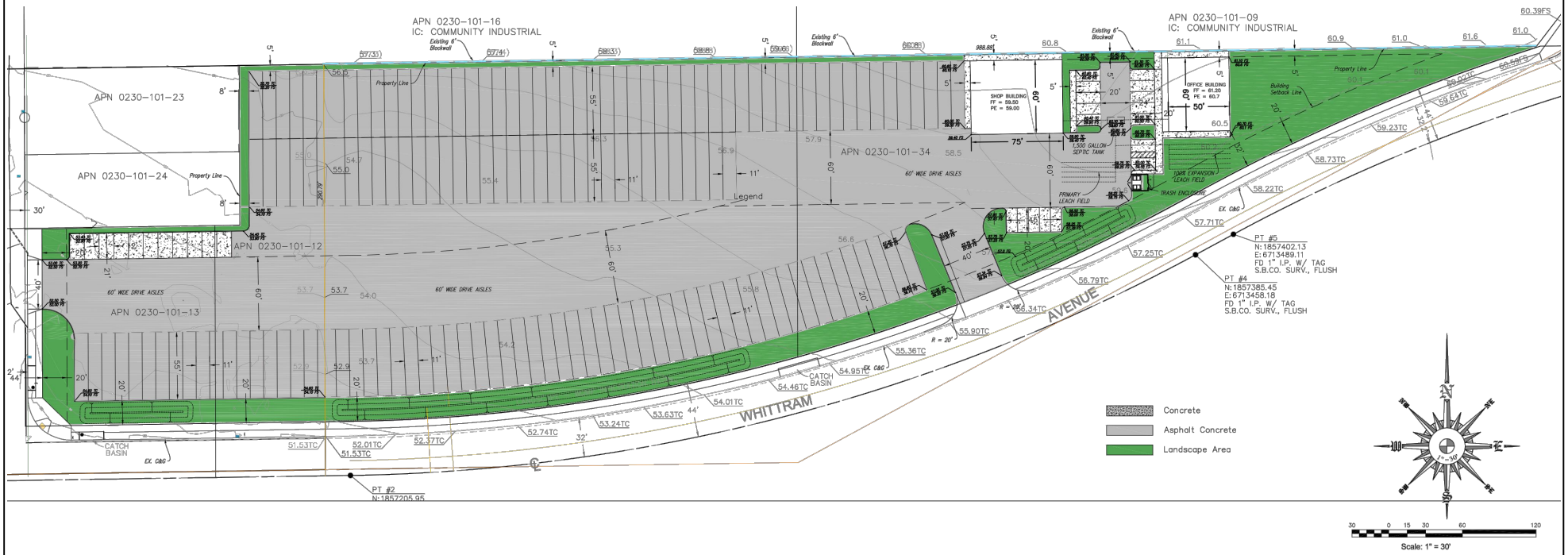
This analysis found that implementation of the State and SCAQMD air quality and GHG emissions reductions regulations were adequate to limit criteria pollutants, toxic air contaminants, odors, and GHG emissions from the proposed project to less than significant levels. No mitigation measures are required for the proposed project with respect to air quality and GHG emissions.



SOURCE: San Bernardino County Parcel Viewer.

VISTA ENVIRONMENTAL

Figure 1
Project Local Study Area



N

SOURCE: RMB Consulting.

VISTA ENVIRONMENTAL

Figure 2
Proposed Site Plan

2.0 AIR POLLUTANTS

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, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), lead, and particulate matter (PM). The ozone precursors consist of nitrogen oxides (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

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, instead it is created by a chemical reaction between NOx and 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

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 oxides (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 lead 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

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 ozone 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 ozone 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 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, 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 California Air Resources Board (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.

Asbestos

Asbestos is listed as a TAC by the California Air Resources Board (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 60 miles southeast 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.

In addition to naturally occurring asbestos, asbestos was used extensively in building construction from the early 1940s through the 1970s as highly-effective and inexpensive fire-retardant material and thermal and acoustic insulator. Asbestos is most commonly found as thermal insulation on pipes, but also may be found in certain types of floor and ceiling tiles. There are two types of asbestos: “friable” and "non-friable.” Friable asbestos generally contains more than 1 percent asbestos by weight or area, and can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand, which releases fibers. Non friable asbestos generally contains more than 1 percent asbestos but cannot be pulverized under hand pressure and generally does not release asbestos fibers. Due to the age of the existing onsite buildings, the project site has a potential to contain asbestos, which is analyzed below in Section 10.4 of this Report.

3.0 GREENHOUSE GASES

3.1 Greenhouse Gases

Constituent gases of the Earth's atmosphere, called atmospheric 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, 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 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 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

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.

3.2 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 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_2 equivalent (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 2022.1 and are detailed in Table A. 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 A – 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 2022.1),that is used in this report (CalEEMod User Guide, April 2022).
Definitions: ppm = parts per million; ppb = parts per billion; ppt = parts per trillion
Source: IPCC 2007, EPA 2015

3.3 Greenhouse Gas Emissions Inventory

According to the Carbon Dioxide Information Analysis Center[1], 9,855 million metric tons (MMT) of CO_2e emissions were created globally in the year 2014. According to the Environmental Protection Agency (EPA), the breakdown of global GHG emissions by sector consists of: 25 percent from electricity and heat production; 21 percent from industry; 24 percent from agriculture, forestry and other land use activities; 14 percent from transportation; 6 percent from building energy use; and 10 percent from all other sources of energy use[2].

According to *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2021,* prepared by EPA, April 2023, total U.S. GHG emissions were 6,340.2 million metric tons (MMT) of CO_2e emissions. Total U.S. emissions have decreased by 2.3 percent between 1990 and 2021, which is down from a high of 15.8 percent above 1990 levels in 2007. Emissions increased from 2020 to 2021 by 5.2 percent. There was a decline in 2020 emission due to the impacts of the COVID-19 pandemic on travel and other economic activity. Between 2020 and 2021, the increase in GHG emissions were driven largely by an increase in fossil fuel combustion due to economic activity rebounding after the height of the COVID-19 pandemic.

According to *California Greenhouse Gas Emissions for 2000 to 2020 Trends of Emissions and Other Indicators*, prepared by the CARB, October 26, 2022, the State of California created 369.2 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) in 2020. The 2020 emissions were 35.3 $MMTCO_2e$ lower than 2019 levels and almost 61.8 $MMTCO_2e$ below the State adopted year 2020 GHG limit of 431 $MMTCO_2e$. The 2019 to 2020 decrease in emissions is likely an anomaly as it was due in large part to the impacts of the COVID-19 pandemic. The transportation sector showed the largest decline in emissions of 27 $MMTCO_2e$ (16 percent) compared to 2019. Between 2019 and 2020, California's Gross Domestic Product (GDP) contracted 2.8 percent, while GHG intensity of California's economy decreased 6.2 percent.

1 Obtained from: https://cdiac.ess-dive.lbl.gov/trends/emis/tre_glob_2014.html
2 Obtained from: https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data

4.0 AIR QUALITY MANAGEMENT

The project site is located within the South Coast Air Basin (Air Basin). The air quality within the Air Basin is addressed through the efforts of various 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.

4.1 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 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 B.

Table B – 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 injury in humans and animals; (b) asthma exacerbation; (c) chronic obstructive pulmonary disease (COPD) exacerbation; (d) respiratory infection; (e) increased school absences, and hospital admissions and emergency department (ED) visits for combined respiratory diseases; (e) increased mortality; (f) possible metabolic effects. Vegetation damage; 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	Visibility reduction (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) possible impairment of central nervous system functions; (d) possible increased risk to fetuses; (f) possible increased risk of pulmonary disease; (g) possible emergency department visits for respiratory diseases overall and visits for asthma.
Nitrogen Dioxide (NO_2)	0.18 ppm / 1-hour 0.030 ppm / annual	100 ppb / 1-hour 0.053 ppm / annual	Short-term (a) asthma exacerbations (“asthma attacks”) Long-term (a) asthma development; (b) higher risk of all-cause, cardiovascular, and respiratory mortality. Both short and long term NO2 exposure is also associated with chronic obstructive pulmonary disease (COPD) risk. Potential impacts on cardiovascular health, mortality and cancer, aggravate chronic respiratory disease. Contribution to atmospheric discoloration

Air Pollutant	Concentration / Averaging Time		Most Relevant Effects
	California Standards	Federal Primary Standards	
Sulfur Dioxide (SO_2)	0.25 ppm / 1-hour 0.04 ppm / 24-hour	75 ppb / 1-hour	Respiratory symptoms (bronchoconstriction, possible wheezing or shortness of breath) during exercise or physical activity in persons with asthma. Possible allergic sensitization, airway inflammation, asthma development.
Respirable Particulate Matter (PM_{10})	50 µg/m^3 / 24-hour 20 µg/m^3 / annual	150 µg/m^3 / 24-hour	Short -term (a) increase in mortality rates; (b) increase in respiratory infections; (c) increase in number and severity of asthma attacks; (d) COPD exacerbation; (e) increase in combined respiratory-diseases and number of hospital admissions; (f) increased mortality due to cardiovascular or respiratory diseases; (g) increase in hospital admissions for acute respiratory conditions; (h) increase in school absences; (i) increase in lost work days; (j) decrease in respiratory function in children; (k) increase medication use in children and adults with asthma.
Suspended Particulate Matter ($PM_{2.5}$)	12 µg/m^3 / annual	35 µg/m^3 / 24-hour 12 µg/m^3 / annual	Long-term (a) reduced lung function growth in children; (b) changes in lung development; (c) development of asthma in children; (d) increased risk of cardiovascular diseases; (e) increased total mortality from lung cancer; (f) increased risk of premature death. Possible link to metabolic, nervous system, and reproductive and developmental effects for short-term and long-term exposure to PM2.5.
Sulfates	25 µg/m^3 / 24-hour	No Federal Standards	(a) Decrease in lung function; (b) aggravation of asthmatic symptoms; (c) vegetation damage; (d) Degradation of visibility; (e) property damage
Lead	1.5 µg/m^3 / 30-day	0.15 µg/m^3 /3-month rolling	(a) Learning disabilities; (b) impairment of blood formation and nerve function; (c) cardiovascular effects, including coronary heart disease and hypertension Possible male reproductive system effects
Hydrogen Sulfide	0.03 ppm / 1-hour	No Federal Standards	Exposure to lower ambient concentrations above the standard may result in objectionable odor and may be accompanied by symptoms such as headaches, nausea, dizziness, nasal irritation, cough, and shortness of breath

Source: 2022 AQMP, SCAQMD, 2022.

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 C, 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 C – National Air Quality Standards Attainment Status – South Coast Air Basin

Criteria Pollutant	Averaging Time	Designation[a]	Attainment Date[b]
Ozone	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 (revised deadline)
	2015 8-Hour (0.07 ppm)[d]	Nonattainment (Extreme)	8/3/2038
	2008 8-Hour (0.075 ppm)[d]	Nonattainment (Extreme)	7/20/2032
	1997 8-Hour (0.08 ppm)[d]	Nonattainment (Extreme)	6/15/2024
PM2.5[e]	2006 24-Hour (35 µg/m^3)	Nonattainment (Serious)	12/31/2019
	2012 Annual (12 µg/m^3)	Nonattainment (Serious)	12/31/2021
	1997 Annual (15 µg/m^3)	Attainment (final determination pending)	4/5/2015 (attained 2013)
PM10[f]	1987 24-Hour (150 µg/m^3)	Attainment (Maintenance)	7/26/2013 (attained)
Lead[g]	2008 3-Months Rolling (0.15 µg/m^3)	Nonattainment (Partial) (Attainment determination requested)	12/31/2015
CO	1971 1-Hour (35 ppm)	Attainment (Maintenance)	6/11/2007
	1971 8-Hour (9 ppm)	Attainment (Maintenance)	6/11/2007
NO_2[h]	2010 1-Hour (100 ppb)	Unclassifiable/Attainment	N/A (attained)
	1971 Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
SO_2[i]	2010 1-Hour (75 ppb)	Unclassifiable/Attainment	1/9/2018
	1971 24-Hour (0.14 ppm)	Unclassifiable/Attainment	3/19/1979

Source: SCAQMD, 2022

Notes:

a) U.S. 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 ozone NAAQS (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; original attainment date was 11/15/2010; the revised attainment date is 2/6/2023.

d) The 2008 8-hour ozone NAAQS (0.075 ppm) was revised to 0.070 ppm, effective 12/28/20115 with classifications and implementation goals to be finalized by 10/1/2017; the 1997 8-hour ozone NAAQS (0.08 ppm) was revoked in the 2008 ozone implementation rule, effective 4/6/2015; there are continuing obligations under the revoked 1997 and revised 2008 ozone NAAQS until they are attained.

e) The attainment deadline for the 2006 24-Hour PM2.5 NAAQS was 12/31/15 for the former "moderate" classification; the EPA approved reclassification to "serious", effective 2/12/16 with an attainment deadline of 12/31/2019; the 2012 (proposal year) annual PM2.5 NAAQS was revised on 1/15/2013, effective 3/18/2013, from 15 to 12 µg/m^3; new annual designations were final 1/15/2015, effective 4/15/2015; on 7/25/2016 the 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 8/24/2016.

f) The annual PM10 standard was revoked, effective 12/18/2006; the 24-hour PM10 NAAQS deadline was 12/31/2006; the Basin's Attainment Re-designation Request and PM10 Maintenance Plan was approved by the EPA on 6/26/2103, effective 7/26/2013.

g) Partial Nonattainment designation – Los Angeles County portion of the Basin only for near-source monitors; expect to remain in attainment based on current monitoring data; attainment re-designation request pending.

h) New 1-hour NO_2 NAAQS became effective 8/2/2010, with attainment designations 1/20/2012; annual NO_2 NAAQS retained.

i) The 1971 annual and 24-hour SO_2 NAAQS were revoked, effective 8/23/2010.

Despite substantial improvements in air quality over the past few decades, some air monitoring stations in the Air Basin still exceed the NAAQS and frequently record the highest ozone levels in the United States. In 2020, monitoring stations in the Air Basin exceeded the most current federal standards on a total of 181 days (49 percent of the year), including: 8-hour ozone (157 days over the 2015 ozone NAAQS), 24-hour PM2.5 (39 days), PM10 (3 days), and NO_2 (1 day). Nine of the top 10 stations in the nation most frequently exceeding the 2015 8-hour ozone NAAQS in 2020 were located within the Air Basin, including stations in San Bernardino, Riverside, and Los Angeles Counties (SCAQMD, 2022).

PM2.5 levels in the Air Basin have improved significantly in recent years. Since 2015, none of the monitoring stations in the Air Basin have recorded violations of the former 1997 annual PM2.5 NAAQS (15.0 µg/m^3). On July 25, 2016 the U.S. EPA finalized a determination that the Air Basin attained the 1997 annual (15.0 µg/m^3) and 24-hour PM2.5 (65 µg/m^3) NAAQS, effective August 24, 2016. However, the Air Basin does not meet the 2012 annual PM2.5 NAAQS (12.0 µg/m^3), with six monitoring stations having design values above the standard for the 2018-2020 period (SCAQMD, 2022).

4.2 State – California Air Resources Board

The 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 in the Air Basin are shown in Table D. 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.

Table D – California Ambient Air Quality Standards Attainment Status – South Coast Air Basin

Criteria Pollutant	Averaging Time	Level[a]	Designation[b]
Ozone	1-Hour	0.09 ppm	Nonattainment
	8-Hour	0.070 ppm	Nonattainment
PM2.5	Annual	12 µg/m^3	Nonattainment
PM10	24-Hour	50 µg/m^3	Nonattainment
	Annual	20 µg/m^3	Nonattainment
Lead	30-Day Average	1.5 µg/m^3	Attainment
CO	1-Hour	20 ppm	Attainment
	8-Hour	9.0 ppm	Attainment
NO_2	1-Hour	0.18 ppm	Attainment
	Annual	0.030	Attainment[c]
SO_2	1-Hour	0.25 ppm	Attainment
	24-Hour	0.04 ppm	Attainment
Sulfates	24-Hour	25 µg/m^3	Attainment
Hydrogen Sulfide	1-Hour	0.03 ppm	Unclassified

Source: SCAQMD, 2022

Notes:

a) CA State standards, or CAAQS, for ozone, SO_2, NO_2, PM10 and PM2.5 are values not to be exceeded; lead, sulfates and H_2S standards are values not to be equaled or exceeded; CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b) CA State designations shown were updated by CARB in 2019, based on the 2016-2018 3-year period; stated designations are based on a 3-year data period after consideration of outliers and exceptional events.

c) The CA-60 near road portion of San Bernardino, Riverside and Los Angeles Counties has recently been redesignated as an attainment area based on data collected between 2018 and 2020.

As shown in Table D, the Air Basin has been designated by the CARB as a non-attainment area for ozone, PM10 and PM2.5 and partial nonattainment for NO_2. Currently, the Air Basin is in attainment with the ambient air quality standards for lead, CO, SO_2 and sulfates, and is unclassified for Hydrogen Sulfide.

The following lists the State of California Code of Regulations (CCR) air quality emission rules that are applicable, but not limited to industrial 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 CARB adopted California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 to reduce 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, Tier 1, or Tier 2 engine. It should be noted that commercial fleets may continue to use their existing Tier 0, 1 and 2 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. 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.

4.3 Regional – Southern California

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the 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 2022 Air Quality Management Plan* (2022 AQMP) was adopted by ARB on January 26, 2023 and has been submitted to the U.S. EPA for final approval, which is anticipated to occur sometime this year. After the 2022 AQMP

has been adopted by the U.S. EPA, the 2022 AQMP will be incorporated into the State Implementation Plan (SIP). The 2022 AQMP establishes actions and strategies to reduce ozone levels to the U.S. EPA 2015 ozone standard of 70 ppb by 2037. The 2022 AQMP promotes extensive use of zero-emission technologies across all stationary and mobile sources coupled with rules and regulations, investment strategies, and incentives.

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 industrial projects in the Air Basin.

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 a 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 areas 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 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 1403 – Asbestos Removal

Rule 1403 governs asbestos emissions from demolition and renovation activities. The existing structures on the project site shall be surveyed for asbestos prior to demolition activities. If asbestos is found within the existing structures, the asbestos shall be removed through utilization of the removal procedures detailed in Rule 1403.

Southern California Association of Governments

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 *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (Connect SoCal), adopted September 3, 2020, and the *2019 Federal Transportation Improvement* Program (2019 FTIP), adopted September 2018, which addresses regional development and

growth forecasts. Although the Connect SoCal and 2019 FTIP are primarily planning documents for future transportation projects a key component of these plans is 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 Connect SoCal, 2019 FTIP, and AQMP are based on projections originating within the City and County General Plans.

4.4 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.

5.0 ENERGY CONSERVATION MANAGEMENT

The regulatory setting related to energy conservation is primarily addressed through State and County regulations, which are discussed below.

5.1 State

Energy conservation management in the State was initiated by the 1974 Warren-Alquist State Energy Resources Conservation and Development Act that created the California Energy Resource Conservation and Development Commission (currently named California Energy Commission [CEC]), which was originally tasked with certifying new electric generating plants based on the need for the plant and the suitability of the site of the plant. In 1976 the Warren-Alquist Act was expanded to include new restrictions on nuclear generating plants, that effectively resulted in a moratorium of any new nuclear generating plants in the State. The following details specific regulations adopted by the State in order to reduce the consumption of energy.

California Code of Regulations (CCR) Title 20

On November 3, 1976 the CEC adopted the *Regulations for Appliance Efficiency Standards Relating to Refrigerators, Refrigerator-Freezers and Freezers and Air Conditioners,* which were the first energy-efficiency standards for appliances. The appliance efficiency regulations have been updated several times by the Commission and the most current version is the *2016 Appliance Efficiency Regulations*, adopted January 2017 and now includes almost all types of appliances and lamps that use electricity, natural gas as well as plumbing fixtures. The authority for the CEC to control the energy-efficiency of appliances is detailed in California Code of Regulations (CCR), Title 20, Division 2, Chapter 4, Article 4, Sections 1601-1609.

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. The 2022 Title 24 standards are the current standards that went into effect on January 1, 2023.

According to the Title 24 Part 6 Fact Sheet, the CEC estimates that over 30 years the 2022 Title 24 standards will reduce 10 $MMTCO_2e$ of GHG emissions, which is equivalent to taking nearly 2.2 million cars off the road for a year. For single-family homes, the CEC estimates that the 2022 Title 24 changes from using natural gas furnaces to electric heat pumps to heat new homes and would reduce net CO_2 emissions by 16,230 $MTCO_2e$ per year, when compared to the 2019 Title 24 standards, which is equivalent of taking 3,641 gas cars off the road each year. The 2022 Title 24 standards will: (1) Increase onsite renewable energy generation; (2) Increases electric load flexibility to support grid reliability; (3) Reduces emissions

from newly constructed buildings; (4) Reduces air pollution for improved public health; and (5) Encourages adoption of environmentally beneficial efficient electric technologies.

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

CCR Title 24, Part 11: *California Green Building Standards* (CalGreen Code) was developed in response to continued efforts to reduce GHG emissions associated with energy consumption. The CalGreen Code is also updated every three years and the current version is the 2022 CalGreen Code that went into effect on January 1, 2023.

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 2022 CalGreen Code over the prior 2019 CalGreen Code for nonresidential development mandatory requirements include repeal of the designated parking spaces for clean air vehicles, an increase in the number of electric vehicle (EV) ready parking spaces and a new requirement for installed Level 2 or DCFC EV charging stations for autos and added EV charging readiness requirements to loading docks, enhanced thermal insulation requirements, and acoustical ceilings are now required.

Executive Order N-79-20

The California Governor issued Executive Order N-79-20 on September 23, 2020 that requires all new passenger cars and trucks and commercial drayage trucks sold in California to be zero-emissions by the year 2035 and all medium- heavy-duty vehicles (commercial trucks) sold in the state to be zero-emission by 2045 for all operations where feasible. Executive Order N-79-20 also requires all off-road vehicles and equipment to transition to 100 percent zero-emission equipment, where feasible by 2035.

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. SB 100 codified the interim renewable energy thresholds from the prior Bills of: 33 percent by 2020, 40 percent by December 31, 2024, 45 percent by December 31, 2027, and 50 percent by December 31, 2030.

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.

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.

Assembly Bill 1493

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 U.S. 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.

The 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 proposed The Safer Affordable Fuel Efficient (SAFE) Vehicles Proposed Rule for Model Years 2021-2026 that amends the corporate average fuel

economy (CAFE) and GHG emissions standards for light vehicles for model years 2021 through 2026. The SAFE Vehicles Rule was published on April 30, 2020 and made effective on June 29, 2020.

5.2 Local – County of San Bernardino

The applicable energy plan for the proposed project is the *County of San Bernardino General Plan Renewable Energy and Conservation Element*, Amended February, 2019. The applicable energy-related policies in the General Plan for the proposed project are shown in Table E.

Table E – Applicable County of San Bernardino General Plan Energy-Related Policies

Policy No.	General Plan Policy
1.4	Encourage residents and businesses to conserve energy.
2.1	Support solar energy generation, solar water heating, wind energy and bioenergy systems that are consistent with the orientation, siting and environmental compatibility policies of the General Plan.
2.2	Promote use of energy storage technologies that are appropriate for the character of the proposed location.
2.3	Encourage the use of feasible emerging and experimental renewable energy technologies that are compatible with County regulatory standards.
2.6	Encourage energy efficiency through appropriate renewable energy systems.
3.1	Prioritize, facilitate, and encourage onsite accessory RE generation to serve the unincorporated county, with a primary focus on rooftop and parking lot solar energy generation.

Source: County of San Bernardino, 2019.

6.0 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.

6.1 International

In 1988, the United Nations established the 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 and on January 21, 2021 President Biden signed an executive order rejoining the Paris Agreement.

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.

6.2 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 mega-watt hour (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 October 11, 2017, the EPA issued a formal proposal to repeal the Clean Power Plan and on June 19, 2019 the EPA replaced the Clean Power Plan with the Affordable Clean Energy rule that is anticipated to lower power sector GHG emissions by 11 million tons by the year 2030.

On April 30, 2020, the EPA and the National Highway Safety Administration published the Final Rule for 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.

6.3 State

The CARB has the primary responsibility 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 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, the 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.

Executive Order B-55-18 and Assembly Bill 1279

The California Governor issued Executive Order B-55-18 in September 2018 that establishes a new statewide goal to achieve carbon neutrality as soon as possible, but no later than 2045. This executive order directs the CARB to work with relevant State agencies to develop a framework for implementation and accounting that tracks progress toward this goal as well as ensuring future scoping plans identify and recommend measures to achieve this carbon neutrality goal. Assembly Bill 1279 was passed by the legislature in September 2022 that codifies the carbon neutrality targets provided in Executive Order B-55-18. The *2022 Scoping Plan for Achieving Carbon Neutrality,* adopted by CARB on December 16, 2022, was prepared in order to meet the carbon neutrality goal targets developed in Executive Order B-55-18 and codified in Assembly Bill 1279.

Executive Order N-79-20

EO N-79-20 establishes targets for when all new vehicles and equipment are zero-emission and is described in more detail above in Section 5.1 under Energy Conservation Management.

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

The Title 24 Part 6 standards have been developed by the CEC primarily for energy conservation and is described in more detail above in Section 5.1 under Energy Conservation Management. It should be noted that implementation of the Title 24 Part 6 building standards would also reduce GHG emissions, since as detailed above in Section 3.3 Greenhouse Gas Emissions Inventory, energy use for residential and commercial buildings creates 9.7 percent of the GHG emissions in the State.

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

The CalGreen Building standards have been developed by the CEC primarily for energy conservation and is described in more detail above in Section 5.1 under Energy Conservation Management. It should be noted that implementation of the CalGreen Building standards would also reduce GHG emissions, since as detailed above under Title 24, Part 6, energy usage from buildings creates 9.7 percent of GHG emissions in the State.

Senate Bill 100

SB 100 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 and is described in more detail above in Section 5.1 under Energy Conservation Management.

Executive Order B-48-18 and Assembly Bill 2127

Executive Order B-48-18 and AB 2127 provides measures 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 and is described in more detail above in Section 5.1 under Energy Conservation Management.

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 set 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 from transportation sources through coordinated regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires the CARB to set regional targets for GHG emissions reductions from passenger vehicle use. In 2010, the 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 Connect SoCal (SCAG, 2020) provides a 2035 GHG emission reduction target of 19 percent reduction over the 2005 per capita emissions levels. The Connect SoCal include new initiatives of land use, transportation and technology to meet the 2035 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

AB 1109 requires reductions in energy usage for lighting and is described in more detail above in Section 5.1 under Energy Conservation Management.

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 the 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 Guidelines for Implementation of the California

Environmental Quality Act (CEQA Guidelines) and incorporated GHG language throughout the CEQA 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, the CARB released the calculated Year 1990 GHG emissions of 431 $MMTCO_2e$. 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.

The 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.

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 in Section 5.1 under Energy Conservation Management.

6.4 Regional – Southern California

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Air Basin. To that end, as a regional agency, the SCAQMD works directly with 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. The SCAQMD is also responsible for GHG emissions for projects where it is the lead agency. However, for other projects in the Air Basin 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, 3,000 $MTCO_2e$ for mixed uses, and 10,000 $MTCO_2e$ for industrial uses.

Southern California Association of Governments

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 Connect SoCal and 2019 FTIP addresses regional development and growth forecasts. Although the Connect SoCal and 2019 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. Connect SoCal, the 2019 FTIP, and the AQMP are based on projections originating within the City and County General Plans.

6.5 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.

7.0 ATMOSPHERIC SETTING

7.1 South Coast Air Basin

The project site is located within western 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.

7.2 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.

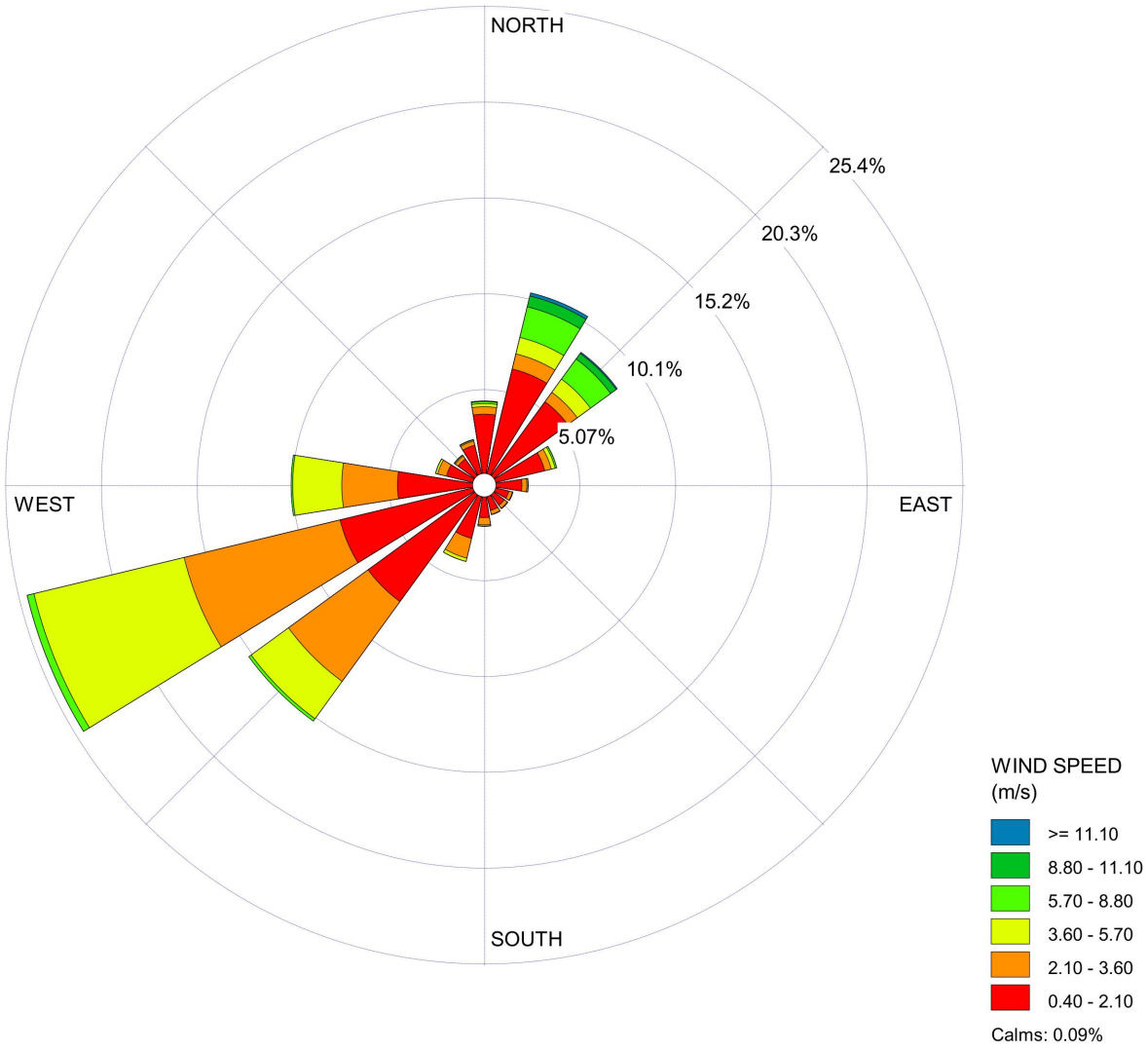
Winds are an important parameter in characterizing the air quality environment of a project site because they both determine the regional pattern of air pollution transport and control the rate of dispersion near a source. Daytime winds in western San Bernardino County are usually light breezes from 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. The wind rose that shows the wind patterns for Fontana Monitoring Station is shown in Figure 3.

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.

WIND ROSE PLOT:
Station #3102

DISPLAY:
Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **Start Date: 1/1/2011 - 00:00** **End Date: 12/31/2016 - 23:59**	COMPANY NAME: **South Coast Air Quality Management District**	
		MODELER: **Melissa Sheffer**	
	CALM WINDS: **0.09%**	TOTAL COUNT: **43273 hrs.**	
	AVG. WIND SPEED: **2.34 m/s**	DATE: **5/25/2017**	PROJECT NO.:

WRPLOT View - Lakes Environmental Software

VISTA ENVIRONMENTAL

Figure 3
Fontana Monitoring Station Wind Rose

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 F. Table F 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 F – 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

7.3 Monitored Local Air Quality

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 Fontana-Arrow Highway Monitoring Station (Fontana Station) that is located approximately a half mile northwest of the project site at 14360 Arrow Boulevard, Fontana. The monitoring data is presented in Table G and shows the most recent three years of monitoring data available 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 G – Local Area Air Quality Monitoring Summary

Pollutant (Standard)	Year[1] 2020	2021	2022
Ozone:			
Maximum 1-Hour Concentration (ppm)	0.151	0.125	0.141
Days > CAAQS (0.09 ppm)	**56**	**44**	**44**
Maximum 8-Hour Concentration (ppm)	0.111	0.103	0.107
Days > NAAQS (0.070 ppm)	**89**	**81**	**68**
Days > CAAQs (0.070 ppm)	**91**	**83**	**70**
Nitrogen Dioxide:			
Maximum 1-Hour Concentration (ppb)	66.4	67.2	68.7
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)	76.8	73.8	62.4
Days > NAAQS (150 ug/m^3)	0	0	0
Days > CAAQS (50 ug/m^3)	**6**	**3**	**6**
Annual Arithmetic Mean (AAM) (ug/m^3)	37.9	30.1	32.0
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 California Measurement (ug/m^3)	57.6	55.1	38.1
Days > NAAQS (35 ug/m^3)	**4**	**2**	**1**
Annual Arithmetic Mean (AAM) (ug/m^3)	12.8	12.1	10.9
Annual > NAAQS and CAAQS (12 ug/m^3)	**Yes**	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 Fontana 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 44 and 56 days each year at the Fontana Station. The State 8-hour ozone standard has been exceeded between 70 and 91 days each year over the last three years at the Fontana Station. The Federal 8-hour ozone standard has been exceeded between 68 and 89 days each year over the last three years at the Fontana 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 Fontana 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 PM10 has been exceeded between 3 and 6 days each year over the past three years at the Fontana Station. Over the past three years the Federal 24-hour standard for PM10 has not been exceeded at the Fontana Station. The annual PM10 concentration at the Fontana 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 PM2.5 has been exceeded between 1 and 4 days each year over the past three years at the Fontana Station. The annual PM2.5 concentrations at the Fontana Station has only exceeded the State and Federal standards in one of the past three years. There does not appear to be a noticeable trend for PM10 or PM2.5 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 (PM10 and PM2.5). 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 PM10 and PM2.5. 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.

7.4 Toxic Air Contaminant Levels in the Air Basin

In order to determine the Air Basin-wide risks associated with major airborne carcinogens, the SCAQMD has conducted a series of Multiple Air Toxics Exposure Study (MATES) studies. According to the MATES V study (SCAQMD, 2021), the project area has an estimated cancer risk of 650 per million persons chance of cancer. In comparison, the average cancer risk for the Air Basin is 457 per million persons. The MATES V study monitored air toxins between May 1, 2018 to April 30, 2019, found that cancer risk from air toxics has declined significantly in the Air Basin with a 40 percent decrease in cancer risk since the monitoring for the MATES IV study that occurred between July 1, 2012 and June 30, 2013 and an 84 percent decrease in cancer risk since the monitoring for the MATES II study that occurred between April 1, 1998 and March 31, 1999.

The MATES V study also analyzed impacts specific to the communities experiencing environmental injustices (EJ communities) that were evaluated using the Senate Bill 535 definition of disadvantaged communities, which found that between MATES IV and MATES V, the cancer risk from air toxics decreased by 57 percent in EJ communities overall, compared to a 53 percent reduction in non-EJ communities.

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.

8.0 MODELING PARAMETERS AND ASSUMPTIONS

8.1 CalEEMod Model Input Parameters

The criteria air pollution and GHG emissions impacts created by the proposed project have been analyzed through use of the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.13. CalEEMod is a computer model published by the California Air Pollution Control Officers Association (CAPCOA) for estimating air pollutant and GHG emissions. The CalEEMod program uses the EMFAC2021 computer program to calculate the emission rates specific for the South Coast Air Basin portion of San Bernardino County for employee, vendor and haul truck vehicle trips and the OFFROAD2007 and OFFROAD2011 computer programs to calculate emission rates for heavy equipment operations. EMFAC2021, OFFROAD2007 and OFFROAD2011 are computer programs generated by CARB that calculates composite emission rates for vehicles. 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 models were set to a project location of the South Coast Air Basin portion of San Bernardino County, utility companies of Southern California Edison and Southern California Gas (with 2025 forecast factors), and project opening year of 2025.

Land Use Parameters

The proposed project consists of demolition of the existing structures on the project site and construction of a truck trailer storage yard with 156 spaces for truck trailers and 11 spaces for tractor rigs. There would also be 3,000 square foot office building located on the eastern portion of the project site and a 4,500 square foot maintenance shop located west of the office building and a 17 space auto parking lot would be located between the two structures. Approximately 39,290 square feet of the project site would be landscaped, with most landscaping located around the perimeter of the project site. The land use parameters that was entered into the CalEEMod model for the proposed project are shown in Table H. The CalEEMod model printouts are provided in Appendix A.

Table H – CalEEMod Land Use Parameters

Proposed Land Use	Land Use Subtype in CalEEMod	Land Use Size[1]	Lot Acreage[2]	Building Area[3] (sq ft)	Landscaped Area[3] (sq ft)
Maintenance Shop & Office	Industrial Park	7.5 TSF	0.89	7,500	6,682
Paved Area (Truck Trailer Parking Area, Driveways & Parking Area)	Parking Lot	156 PS	4.33	--	32,608

Notes:
[1] TSF = Thousand Square Feet; PS = Parking Space (The Paved Area was set to 156 spaces to match Traffic Study, however the Lot Acreage was increased to match total area paved that includes the auto parking areas and driveways).
[2] Lot acreage calculated based on the total project site of 5.22-acres.
[3] Building square feet represent area where architectural coatings will be applied.
[4] Landscaped area based on a total of 39,290 square feet of landscaped spread proportionally between land uses.

Construction Parameters

Construction of the proposed project is anticipated to start around June 2024 and was modeled based on the CalEEMod default timing of 15 months. 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) Demolition; 2) Site Preparation; 3) Grading, 4) Building construction, 5) Paving; and 6) Application of architectural coatings.

CalEEMod 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 regulatory requirements. This includes the required to adherence to SCAQMD Rule 403, which requires that the Best Available Control Measures be utilized to reduce fugitive dust emissions and was modeled in CalEEMod by selection of mitigation of water all exposed areas three times per day.

Demolition

The demolition phase has been modeled as starting in June 2024 and would occur over four weeks, which is based on the CalEEMod default timing. The demolition phase would consist of demolishing the existing structures on the project site that total approximate 86,995 square feet of building space that would generate an average of 2.1 haul truck trips per day over duration of demolition phase. In addition, the demolition activities would generate 15 worker trips per day. In order to account for water truck emissions, three onsite truck trips per day with a quarter-mile length was added to the demolition phase. The onsite equipment would consist of one concrete/industrial saw, three excavators, and two rubber-tired dozers, which is based on the CalEEMod default equipment mix.

Site Preparation

The site preparation phase would consist of removing any vegetation, tree stumps, and stones onsite prior to grading. The site preparation phase is anticipated to start after completion of the demolition phase and was modeled as occurring over two weeks, which is based on the CalEEMod default timing. The site preparation activities would generate 17.5 worker trips per day. In order to account for water truck emissions, three onsite truck trips per day with a quarter-mile length 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.

Grading

The grading phase would occur after completion of the site preparation phase and was modeled as occurring over four weeks, which is based on the CalEEMod default timing. The grading would likely be balanced, which would result in no dirt being imported or exported from the project site. The grading activities would generate an average of 15 worker trips per day. In order to account for water truck emissions, three onsite truck trips per day with a quarter-mile length were added to the grading phase. The onsite equipment would consist of two excavators, one grader, one rubber-tired dozer, two scrapers, and two of either tractors, loaders, or backhoes, which is based on the CalEEMod default equipment mix.

Building Construction

The building construction would occur after the completion of the grading phase and was modeled as occurring over 10 months, which is based on the CalEEMod default timing. The building construction phase would generate an average of 3.15 worker trips and 1.23 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 truck trailer, truck rigs, and auto parking spaces and driveways. The paving phase would occur after completion of the building construction phase and was

modeled as occurring over four weeks, which is based on the CalEEMod default timing. 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 would occur after completion of the paving phase and was modeled as occurring over four weeks, which is based on the CalEEMod default timing. The architectural coating phase was modeled based on covering 11,250 square feet of non-residential interior area, 3,750 square feet of non-residential exterior area, and 11,317 square feet of parking area. The architectural coating phase would generate an average of 0.63 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 and existing business park on the project site 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 and the parameters entered for each operational emission source are described below.

Mobile Sources

Mobile sources include emissions the additional vehicle miles generated from the proposed project. The daily vehicle trip rates associated with the proposed project have been obtained from the *Whittram Avenue Truck Trailer Parking Lot Project Trip Generation and VMT Screening Analysis, County of San Bernardino* (Traffic Analysis), prepared by RK Engineering Group, Inc., August 29, 2023. The Traffic Analysis took traffic counts at a similar existing truck trailer yard in El Monte that had 150 trailer spaces and generated 46 passenger vehicles, 58 3-axle trucks, and 67 4-axle truck trips per day. When converted to the proposed project with 156 truck trailer spaces, this resulted in 47.9 passenger vehicles, 60 3-axle trucks, and 69.6 4-axle truck trips per day.

The 47.9 passenger vehicle trips per day were analyzed under the Industrial Park land use and the 129 truck trips per day were analyzed under the Parking Lot land use. The vehicle mix utilized in CalEEMod for the Industrial Park land use was adjusted to 100 percent light duty automobiles and the Parking Lot land use was adjusted to 46.4 percent Medium Heavy Duty Trucks (MHD) for the 3-axle trucks and 53.6 percent Heavy Heavy Duty Trucks (HHD) for the 4-axle trucks. No other changes were made to the CalEEMod default mobile source parameters.

Area Sources

Area sources include emissions from consumer products, landscape equipment, and architectural coatings. The area source emissions were based on the default area source emissions rates for both the proposed project and existing project in CalEEMod. No changes were made to the default area source parameters in CalEEMod.

Energy Usage

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

Solid Waste

Waste includes the GHG emissions associated with the processing of waste 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 for the proposed project. No changes were made to the default solid waste parameters in CalEEMod.

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 rates for the proposed project. No changes were made to the default water and wastewater parameters in CalEEMod.

8.2 Energy Use Calculations

The proposed project is anticipated to consume energy during both construction and operation of the proposed project and the parameters utilized to calculate energy use from construction and operation of the proposed project are detailed separately below.

Construction-Related Energy Use

Construction of the proposed project is anticipated to use energy in the forms of petroleum fuel for both off-road equipment as well as from the transport of workers and materials to and from the project site and the calculations for each source are described below.

Off-Road Construction Equipment

The off-road construction equipment fuel usage was calculated through use of the CalEEMod model's default off-road equipment assumptions detailed above in Section 8.1. For each piece of off-road equipment, the fuel usage was calculated through use of the *2017 Off-road Diesel Emission Factors* spreadsheet, prepared by the CARB (https://ww3.arb.ca.gov/msei/ordiesel.htm). The Spreadsheet provides the following formula to calculate fuel usage from off-road equipment:

> Fuel Used = Load Factor x Horsepower x Total Operational Hours x BSFC / Unit Conversion
>
> Where:
>
> Load Factor - Obtained from CalEEMod default values
>
> Horsepower – Obtained from CalEEMod default values
>
> Total Operational Hours – Calculated by multiplying CalEEMod default daily hours by CalEEMod default number of working days for each phase of construction
>
> BSFC – Brake Specific Fuel Consumption (pounds per horsepower-hour) – If less than 100 Horsepower = 0.408, if greater than 100 Horsepower = 0.367
>
> Unit Conversion – Converts pounds to gallons = 7.109

Table I shows the off-road construction equipment fuel calculations based on the above formula. Table I shows that the off-road equipment utilized during construction of the proposed project would consume approximately 35,632 gallons of diesel fuel.

Table I – Off-Road Equipment and Fuel Consumption from Construction of the Proposed Project

Equipment Type	Equipment Quantity	Horse-power	Load Factor	Operating Hours per Day	Total Operational Hours[1]	Fuel Used (gallons)
Demolition						
Concrete/Industrial Saw	1	33	0.73	8	160	221
Excavators	3	36	0.38	8	480	377
Rubber Tired Dozers	2	367	0.4	8	320	2,425
Site Preparation						
Rubber Tired Dozers	3	367	0.4	8	240	1,819
Tractors/Loaders/Backhoes	4	84	0.37	8	320	571
Grading						
Excavator	1	36	0.38	8	160	126
Grader	1	148	0.41	8	160	501
Rubber Tired Dozer	1	367	0.4	8	160	1,213
Tractors/Loaders/Backhoes	3	84	0.37	8	480	856
Building Construction						
Crane	1	367	0.29	7	1,610	8,846
Forklifts	3	82	0.2	8	5,520	5,196
Generator Set	1	14	0.74	8	1,840	1,094
Tractors/Loaders/Backhoes	3	84	0.37	7	4,830	8,615
Welder	1	46	0.45	8	1,840	2,186
Paving						
Pavers	2	81	0.42	8	320	625
Paving Equipment	2	89	0.36	8	320	588
Rollers	2	36	0.38	8	320	251
Architectural Coating						
Air Compressor	1	37	0.48	6	120	122
Total Off-Road Equipment Diesel Fuel Used during Construction (gallons)						**35,632**

Notes:
[1] Based on: 20 days for Demolition, 10 days for Site Preparation, 20 days for Grading; 230 days for Building Construction; 20 days for Paving; and 20 days for Architectural Coating.
Source: CalEEMod Version 2022.1 (see Appendix A); CARB, 2017.

On-Road Construction-Related Vehicle Trips

The on-road construction-related vehicle trips fuel usage was calculated through use of the construction vehicle trip assumptions from the CalEEMod model run as detailed above in Section 8.1. The calculated total construction miles were then divided by the fleet average for the South Coast Air Basin miles per gallon rates for the year 2024 calculated through use of the EMFAC2017 model (https://www.arb.ca.gov/emfac/2017/) and the EMFAC2017 model printouts are shown in Appendix B. It should be noted that the EMFAC2021 model was not utilized, since it does not provide the information required to calculate the fleet average miles per gallon rates.

The worker trips were based on the entire fleet average miles per gallon rate for gasoline powered vehicles and the vendor trips were based on the Heavy-Heavy Duty Truck (HHDT), Medium Duty Vehicle (MDV), and Medium Heavy Duty Vehicle (MHDV) fleet average miles per gallon rate for diesel-powered

vehicles. Table J shows the on-road construction vehicle trips modeled in CalEEMod and the fuel usage calculations.

Table J – On-Road Vehicle Trips and Fuel Consumption from Construction of Proposed Project

Vehicle Trip Types / Fuel Type	Daily Trips	Trip Length (miles)	Total Miles per Day	Total Miles per Phase[1]	Fleet Average Miles per Gallon[2]	Fuel Used (gallons)
Demolition						
Worker (Gasoline)	15	18.5	278	5,550	27.5	202
Haul (Diesel)	2.1	20	42	840	8.8	95
Water Trucks (Diesel)	3	0.25	0.75	15	8.8	2
Site Preparation						
Worker (Gasoline)	17.5	18.5	324	3,238	27.5	118
Water Trucks (Diesel)	3	0.25	0.75	8	8.8	1
Grading						
Worker (Gasoline)	15	18.5	278	5,550	27.5	202
Water Trucks (Diesel)	3	0.25	0.75	15	8.8	2
Building Construction						
Worker (Gasoline)	3.15	18.5	58	13,403	27.5	488
Vendor (Diesel)	1.23	10.2	13	2,886	8.8	327
Paving						
Worker (Gasoline)	15	18.5	278	5,550	27.5	202
Architectural Coating						
Worker (Gasoline)	0.63	18.5	12	233	27.5	8
Total Gasoline Fuel Used from On-Road Construction Vehicles (gallons)						**1,220**
Total Diesel Fuel Used from On-Road Construction Vehicles (gallons)						**426**

Notes:
[1] Based on: 20 days for Demolition; 10 days for Site Preparation, 20 days for Grading; 230 days for Building Construction; 20 days for Paving; and 20 days for Architectural Coating.
[2] From EMFAC 2017 model (see Appendix B). Worker Trips based on entire fleet of gasoline vehicles and Vendor Trips based on only truck fleet of diesel vehicles.
Source: CalEEMod Version 2022.1; CARB, 2018.

Table J shows that the on-road construction-related vehicle trips would consume approximately 1,220 gallons of gasoline and approximately 426 gallons of diesel fuel. As detailed above, Table I shows that the off-road construction equipment would consume approximately 35,632 gallons of diesel fuel. This would result in the total consumption of approximately 1,220 gallons of gasoline and 36,058 gallons of diesel fuel from construction of the proposed project.

Operations-Related Energy Use

The operation of the proposed project is anticipated to use energy in the forms of petroleum fuel, electricity, and natural gas, and the calculations for each source are described below.

Operational Petroleum Fuel

The on-road operations-related vehicle trips fuel usage was calculated through use of the total annual vehicle miles traveled assumptions from the CalEEMod model run (see Appendix A), which found that operation of the proposed project would generate 167,360 vehicle miles traveled per year from autos and

would generate 452,869 vehicle miles traveled per year from trucks. The calculated total operational miles were then divided by the South Coast Air Basin fleet average rates of 27.5 miles per gallon of gasoline for automobiles and the fleet average rate of 8.8 miles per gallon of diesel for trucks, which was calculated through use of the EMFAC2017 model and based on the year 2024. The EMFAC2017 model printouts are shown in Appendix B.

Based on the above calculation methodology, the operation of automobiles would consume approximately 6,091 gallons of gasoline per year and the operation of trucks would consume approximately 51,285 gallons of diesel per year.

Operational Electricity Use

The operations-related electricity usage was calculated in the CalEEMod model, that depicts the electricity use from each land use that are shown below in kilo-watt hours (kWh) per year:

- Office and Maintenance Shop – 130,889 kWh/year
- Truck Trailer and Rig Parking Area, Driveways, and Auto Parking Area – 165,227 kWh/year

Based on the above, it is anticipated that the proposed project would utilize 296,116 kWh per year of electricity.

Operational Natural Gas Use

The operations-related natural gas usage was calculated in the CalEEMod model that depicts the natural gas use from each land use that are shown below in kilo British Thermal Units (kBTU) per year (CalEEMod land use shown in brackets):

- Office and Maintenance Shop – 205,800 kBTU/year
- Truck Trailer and Rig Parking Area, Driveways, and Auto Parking Area – 0 kBTU/year

Based on the above, it is anticipated that the proposed project will use approximately 205,800 kBTU per year, which is equivalent to 206 mega-British Thermal units (MBTU) per year of natural gas.

8.3 Toxic Air Contaminant 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, *Air Toxics Hot Spots Program Risk Assessment Guidelines* (OEHHA Guidelines), prepared by Office of Environmental Health Hazard, February 2015, and *Risk Assessment Procedures for Rules 1401, 1401.1 and 212* (SCAQMD Risk Assessment Procedures), prepared by SCAQMD, September 1, 2017. 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 12.0.0 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, which is based on SCAQMD recommended modeling parameters. AERMAP (the terrain pre-processor for AERMOD) was run

with two USGS 7.5-meter maps of Guasti for the western portion of the project area and Fontana for the eastern portion of the project area.

Meteorological Data

Meteorological data from the SCAQMD's Perris Monitoring Site was selected for this modeling application. The SCAQMD's meteorological data is provided at: https://www.aqmd.gov/home/air-quality/meteorological-data/data-for-aermod. Five full years of meteorological data were collected at the Fontana Station by the SCAQMD for 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 per SCAQMD guidance.

Receptor Placement

The nearest sensitive receptors to the project site are residents at the single-family homes located as near as seven feet northwest of the project site. There are also additional homes interspersed with industrial uses along Calabash Avenue, north of the project site. In addition, there is a small mobile home park located as near as 900 feet east of the project site. Discrete receptors were placed at 13 representative nearby sensitive receptors. Figure 4 shows the locations of the sources and receptors modeled in the AERMOD model for TAC emissions.

EMFAC2021 Model

The truck travel and truck idling emission rates were obtained from the EMFAC2021 model Version 1.0.2. The EMFAC2021 model is the latest emissions inventory model released by CARB that calculates motor vehicle emissions from vehicles operating on roads in California. The EMFAC2021 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 operational 3-axle and 4+-axle truck trips were modeled in the EMFAC2021 model through use of the Truck 2 Vehicle Category that covers all truck classifications over 14,000 pounds. Since vehicle emission factors are dependent on vehicle speed, emission factors were obtained for 10, 25, and 40 miles per hour and idling rates. The EMFAC2021 model run printout is provided in Appendix C.

The cancer risk analysis is based on a 30-year analysis period. Therefore, the analysis period was segmented into a construction and three operational age sensitivity time periods, consistent with the cancer risk estimation methodology. Although, DPM is a subset of PM2.5 emission, in order to provide a conservative analysis, DPM has been analyzed as PM10 emissions, which includes all of PM2.5 emissions plus particulates that range between 2.5 and 10 micrometers. The DPM PM10 truck running emission rates utilized in this assessment are shown in Table K; the DPM PM10 truck idling emission rates utilized in this assessment are shown in Table L.

Table K – EMFAC2021 Diesel Truck Running PM10 Emission Rates

Vehicle Class	Speed (mph)	EMFAC2021 PM10 Running Emissions Rates (grams/mile)		
		2025 to 2027	2028 to 2042	2043 to 2054
Truck 2 (3 & 4+ axle)	10	0.0132	0.0087	0.0075
	25	0.0064	0.0046	0.0041
	40	0.0084	0.0071	0.0068

Source: EMFAC2021 version 1.0.2 (see Appendix C).

Table L – EMFAC2021 Diesel Truck Idling PM10 Emission Rates

Vehicle Class	EMFAC2021 PM10 Idling Emissions Rates (grams/hour)		
	2025 to 2027	2028 to 2042	2043 to 2054
Truck 2	0.0177	0.0116	0.0099

Source: EMFAC2021 version 1.0.2 (see Appendix C).

TAC Emission Sources

Operational DPM emissions would be generated from diesel truck running and idling emissions, which are described separately below.

Operational Truck Travel

As detailed above in Section 8.1, the Traffic Analysis, (RK Engineering Group, Inc., 2023) took traffic counts at a similar existing truck trailer yard in El Monte that had 150 trailer spaces and generated 46 passenger vehicles, 58 3-axle trucks, and 67 4-axle truck trips per day. When converted to the proposed project with 156 truck trailer spaces, this resulted in 47.9 passenger vehicles, 60 3-axle trucks, and 69.6 4-axle truck trips per day, or a total of 129.6 daily truck trips. The 129.6 daily truck trips were analyzed based on the Truck 2 emission rates from the EMFAC2021 model.

Since the Traffic Analysis did not include any truck trip distribution information, it has been assumed that 50 percent of the truck trips would travel north on Calabash Avenue and 50 percent would travel east on Slover Avenue. For the onsite traffic, it was assumed each trip would travel from the driveway on Whittram Avenue to the driveway on Calabash Avenue.

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 M. The diesel truck line volume source truck routes were modeled with a 6-foot height and 12-foot width for the onsite truck travel and Calabash Avenue and a 40-foot width on Whittram Avenue.

Table M – AERMOD Model Operational DPM Truck Travel Emissions Sources

Source ID	Description	Daily Truck Trips[1]	Length of Truck Route (meters)	DPM Emission Rates (grams/second)		
				2025-2027	2028-2042	2043-2054
ONSITE	Onsite Truck Travel	130	307	3.76E-06	2.49E-06	2.49E-06
CALAB	Calabash Ave Truck Travel	65	391	1.16E-06	8.43E-07	2.11E-07
WHITT	Whittram Ave Truck Travel	65	410	1.61E-06	1.36E-06	1.30E-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: Vista Environmental; EMFAC2021.

Onsite Truck Idling

The onsite diesel truck idling emissions were modeled as one point source located in the center of the loading area. The analysis was based on each truck trip idling on the project site for 5 minutes. 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 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 N. 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 EMFAC2021 emissions rates that are detailed above and were converted to grams per second.

Table N – AERMOD Model Operational DPM Truck Idling Emissions Sources

Source ID	Description	Daily Truck Trips[1]	DPM Emission Rates (grams/second)		
			2025-2027	2028-2042	2043-2054
IDLING	Truck Idling on Project Site	130	2.86E-05	1.45E-06	1.24E-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: Vista Environmental; EMFAC2021.

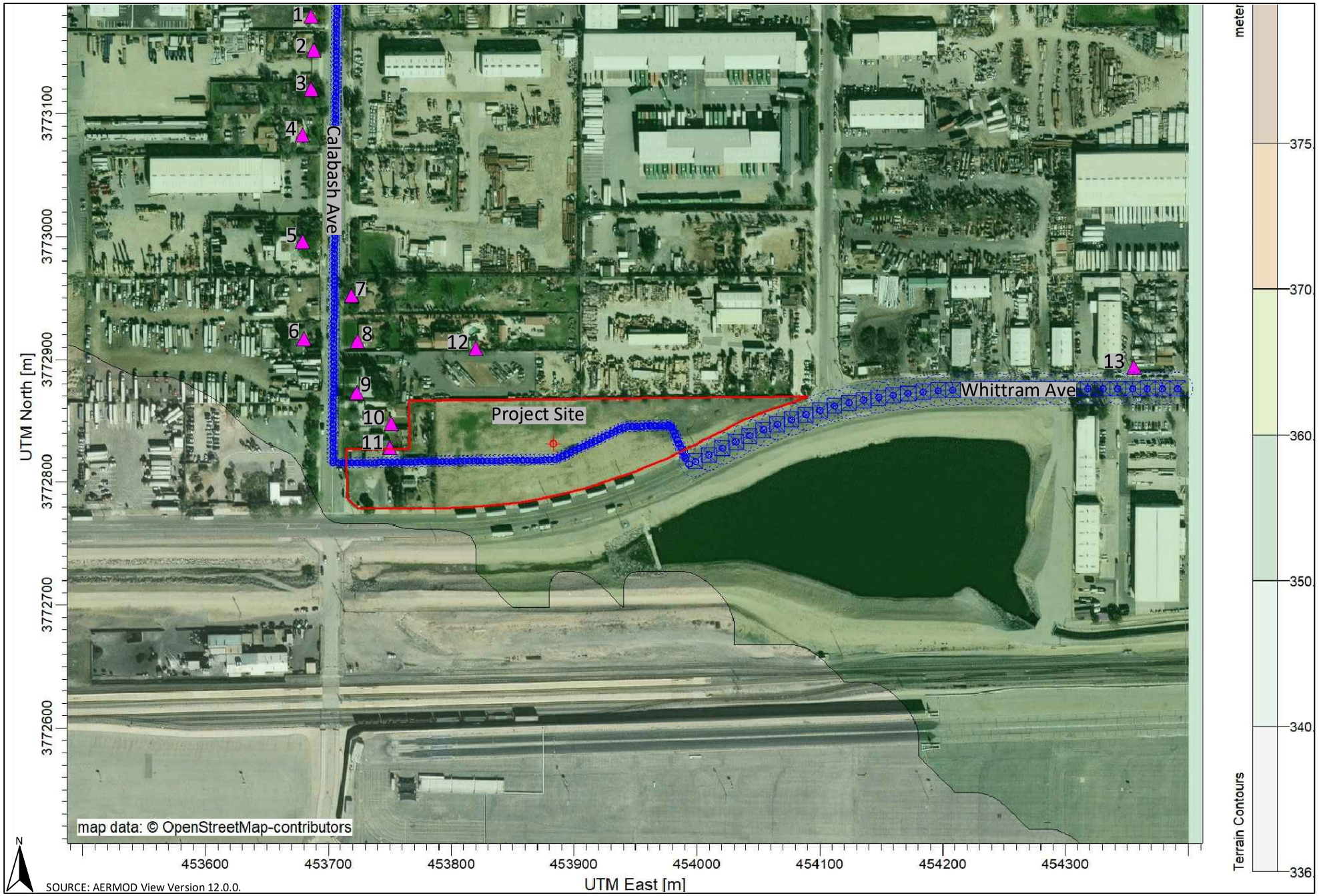


Figure 4
AERMOD Model Sources and Receptors Placement

9.0 THRESHOLDS OF SIGNIFICANCE

9.1 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, the 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 O.

Table O – 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: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2

9.2 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. The 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 in Section 6.3, 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 5.22-acre project site. The nearest sensitive receptors to the project site are residents at the single-family homes located as near as seven feet (2.1 meters) northwest of the project site. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. Table P below shows the LSTs for NO_2, PM10 and PM2.5 for both construction and operational activities.

Table P – 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 sensitive receptors to the project site are single-family homes that are located as near as 7 feet (2.1 meters) northwest of the project site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25 meter threshold.

Source: Calculated from SCAQMD's Mass Rate Look-up Tables for five acres in Air Monitoring Area 34, Central San Bernardino Valley.

9.3 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 the SCAQMD, August 2003, recommends that if a 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 HAP should be analyzed through a comprehensive facility-wide health risk assessment (HRA).

The comprehensive HRA for the proposed project can be found below in Section 10.4.

9.4 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.

9.5 Energy Conservation

The *2022 CEQA California Environmental Quality Act Statutes & Guidelines* (2022 CEQA Guidelines) include an Energy Section that analyzes the proposed project's energy consumption in order to avoid or reduce inefficient, wasteful or unnecessary consumption of energy. Appendix F of the 2022 CEQA Statute and Guidelines, states the following:

> The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:
>
> (1) Decreasing overall per capita energy consumption,
>
> (2) Decreasing reliance on fossil fuels such as coal, natural gas and oil, and
>
> (3) Increasing reliance on renewable energy sources.

Since the Energy Section was recently added, no state or local agencies have adopted specific criteria or thresholds to be utilized in an energy impact analysis. However, Appendix F, Subsection II.C of the 2022 CEQA Guidelines provides the following criteria for determining significance.

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project life cycle including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
2. The effects of the project on local and regional energy supplies and on requirement for additional capacity.
3. The effects of the project on peak and base period demands for electricity and other forms of energy.
4. The degree to which the project complies with existing energy standards.
5. The effects of the project on energy resources.
6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

If the proposed project creates inefficient, wasteful or unnecessary consumption of energy during construction or operation activities or conflicts with a state or local plan for renewable energy or energy efficiency, then the proposed project would create a significant energy impact.

9.6 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 MTC 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 MTC 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.

10.0 IMPACT ANALYSIS

10.1 CEQA Thresholds of Significance

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

10.2 Air Quality Plan Consistency

The proposed project would not 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 CEQA Guidelines require 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 the SCAQMD regional thresholds of significance discussed above in Section 9.1 or local thresholds of significance discussed above in Section 9.2. 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 discussed above in Section 9.1. The analysis for long-term local air quality impacts showed that local pollutant concentrations would not 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 Connect SoCal and 2019 FTIP. Connect SoCal is a major planning document for the regional transportation and land use network within Southern California. The Connect SoCal is a long-range plan that is required by federal and state requirements placed on SCAG and is updated every four years. The 2019 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 County of San Bernardino General Plan's Land Use Plan defines the assumptions that are represented in AQMP.

The project site is currently designated Limited Industrial (LI) in the General Plan. The proposed truck trailer parking is an allowed use under the LI General Plan land use designation. Since the proposed project would not require a General Plan Amendment, implementation of 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. 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.

Level of Significance

Less than significant impact.

10.3 Cumulative Net Increase in Non-Attainment Pollution

The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard.

The SCAQMD has published a report on how to address cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf). In this report the AQMD clearly states (Page D-3):

> *"…the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or Environmental Impact Report (EIR). The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for TAC emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility- wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts. Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."*

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. 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 demolition of the existing structures on the project site, site preparation and grading of the 5.22-acre project site, building construction of the maintenance shop and office building, paving of the truck trailer storage yard and auto parking area, and application of architectural coatings. The CalEEMod model has been utilized to calculate the construction-related emissions from the proposed project and the input parameters utilized in this analysis have been detailed in Section 8.1. The maximum daily construction-related criteria pollutant emissions from the proposed project are shown below in Table Q.

Table Q – Construction-Related Criteria Pollutant Emissions

Season and Year of Construction	Maximum Daily Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
Summer 2024	3.74	36.1	34.4	0.05	8.04	4.26
Winter 2024	1.22	11.3	13.3	0.02	0.55	0.47
Summer 2025	6.23	10.5	13.3	0.02	0.54	0.41
Winter 2025	1.14	10.5	13.2	0.02	0.48	0.41
Maximum Daily Construction Emissions	**6.23**	**36.1**	**34.4**	**0.05**	**8.04**	**4.26**
SCQAMD Regional Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
SCAQMD Local Thresholds[1]	**--**	**270**	**1,746**	**--**	**14**	**8**
Exceeds Thresholds?	No	No	No	No	No	No

Notes:
[1] The nearest sensitive receptors to the project site are single-family homes that are located as near as 7 feet (2.1 meters) northwest of the project site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25 meter threshold. Calculated from SCAQMD's Mass Rate Look-up Tables for five acres in Air Monitoring Area 34, Central San Bernardino Valley.
Source: CalEEMod Version 2022.1.

Table Q shows that none of the analyzed criteria pollutants would exceed either the regional or local emissions thresholds during construction of the proposed project. Therefore, a less than significant regional or local air quality impact would occur from construction of the proposed project.

Operational Emissions

The ongoing 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 operations-related criteria air quality impacts created by the proposed project have been analyzed through use of the CalEEMod model and the input parameters utilized in this analysis have been detailed in Section 8.1. 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 R and the CalEEMod emissions printouts are shown in Appendix A.

Table R – Operational Criteria Pollutant Emissions

Emissions Source	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
Mobile Sources[1]	0.1	4.56	2.44	0.03	1.12	0.33
Area Sources[2]	0.26	<0.01	0.33	<0.01	<0.01	<0.01
Energy Usage[3]	<0.01	0.06	0.05	<0.01	<0.01	<0.01
Total Emissions	**0.36**	**4.62**	**2.82**	**0.03**	**1.12**	**0.33**
SCQAMD Regional Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
SCAQMD Local Thresholds[4]	**--**	**270**	**1,746**	**--**	**4**	**2**
Exceeds Thresholds?	No	No	No	No	No	No

Notes:
[1] Mobile sources consist of emissions from vehicles and road dust.
[2] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consist of emissions from natural gas usage.
[4] The nearest sensitive receptors to the project site are single-family homes that are located as near as 7 feet (2.1 meters) northwest of the project site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25 meter threshold. Calculated from SCAQMD's Mass Rate Look-up Tables for five acres in Air Monitoring Area 34, Central San Bernardino Valley.
Source: Calculated from CalEEMod Version 2022.1.

The data provided in Table R shows that none of the analyzed criteria pollutants would exceed either the regional or local emissions thresholds during operation of the proposed project. Therefore, less than significant regional and local air quality impacts would occur from operation of the proposed project.

Friant Ranch Case

The operations-related regional criteria air quality impacts In *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (also referred to as "*Friant Ranch*"), the California Supreme Court held that when an EIR concluded that when a project would have significant impacts to air quality impacts, an EIR should "make a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." In order to determine compliance with this Case, the Court developed a multi-part test that includes the following:

1) The air quality discussion shall describe the specific health risks created from each criteria pollutant, including diesel particulate matter.

This Analysis details the specific health risks created from each criteria pollutant above in Section 4.1 and specifically in Table B. In addition, the specific health risks created from diesel particulate matter is detailed above in Section 2.2 of this analysis. As such, this analysis meets the part 1 requirements of the Friant Ranch Case.

2) The analysis shall identify the magnitude of the health risks created from the Project. The Ruling details how to identify the magnitude of the health risks. Specifically, on page 24 of the ruling it states "The Court of Appeal identified several ways in which the EIR could have framed the analysis so as to adequately inform the public and decision makers of possible adverse health effects. The County could have, for example, identified the Project's impact on the days of nonattainment per year."

The Friant ranch Case found that an EIR's air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided. As noted in the Brief of Amicus Curiae by the SCAQMD in the Friant Ranch case (https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf) (Brief), the SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes. The SCAQMD discusses that it may be infeasible to quantify health risks caused by projects similar to the proposed Project, due to many factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). The Brief states that it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s)). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk, it does not necessarily mean anyone will contract cancer as a result of the Project. The Brief also cites the author of the CARB methodology, which reported that a PM2.5 methodology is not suited for small projects and may yield unreliable results. Similarly, SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_X or VOC emissions from relatively small projects, due to photochemistry and regional model limitations. The Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful.

On the other hand, for extremely large regional projects (unlike the proposed project), the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 pounds per day of NOx and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone. As shown above in Table Q, project-related construction activities would generate a maximum of 6.23 pounds per day of VOC and 36.1 pounds per day of NOx and as shown above in Table R, operation of the proposed project would generate 0.36 pounds per day of VOC and 4.62 pounds per day NOx. The proposed project would not generate anywhere near these levels of 6,620 pounds per day of NOx or 89,190 pounds per day of VOC emissions. Therefore, the proposed project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level.

Notwithstanding, this analysis does evaluate the proposed project's localized impact on air quality for emissions of CO, NOX, PM10, and PM2.5 by comparing the proposed project's onsite emissions to the SCAQMD's applicable LST thresholds. As evaluated in this analysis, the proposed project would not result in emissions that exceeded the SCAQMD's LSTs. Therefore, the proposed project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NOX, PM10, and PM2.5.

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 during the peak morning and afternoon periods that had daily traffic volumes of approximately 100,000 vehicles per day and did not predict a violation of CO standards[3]. Since the nearby intersections to the proposed project are much smaller with less traffic than what was analyzed by the SCAQMD and since the Traffic Analysis (RK Engineering Group, Inc., 2023), found the project would generate 363 daily trips, 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.

Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant.

[3] 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.

Level of Significance

Less than significant impact.

10.4 Sensitive Receptors

The proposed project would not expose sensitive receptors to substantial pollutant concentrations. The local concentrations of criteria pollutant emissions produced in the nearby vicinity of the proposed project, which may expose sensitive receptors to substantial concentrations have been calculated above in Section 10.3 for both construction and operations, which are discussed separately below. The discussion below also includes an analysis of the potential impacts from local criteria pollutant and toxic air contaminant emissions. The nearest sensitive receptors to the project site are residents at the single-family homes located as near as seven feet northwest of the project site. There are also additional homes interspersed with industrial uses along Calabash Avenue, north of the project site. In addition, there is a small mobile home park located as near as 900 feet east of the project site.

Construction-Related Sensitive Receptor Impacts

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 have been analyzed above in Section 10.3 and found that the construction of the proposed project would not exceed the local NOx, CO, PM10 and PM2.5 thresholds of significance discussed above in Section 9.2. 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

Construction activities are anticipated to generate TAC emissions from diesel particulate matter (DPM) associated with the operation of trucks and off-road equipment and from possible asbestos in the structures to be demolished.

Diesel Particulate Matter Emissions

The greatest potential for toxic air contaminant emissions would be related to 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).

The proposed project consists of development of primarily a truck trailer parking lot on a flat lot, that will utilize very limited number of heavy-duty construction equipment to construct the parking lot portion of the project. The nearest sensitive receptors consist of two single-family homes that are located upwind (northwest side) of the project site. Although, the homes are as near as 7 feet from the proposed parking lot area, where the use of heavy-duty construction equipment would be limited to a few days of grading and paving activities, the homes are over 700 feet away from the area where the more intensive

construction activities will occur for the construction of the two proposed structures. For these reasons, construction of 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 at the nearby sensitive receptors.

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, Tier 1 or 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. Therefore, due to the limitations in off-road construction equipment DPM emissions from implementation of Section 2448, a less than significant short-term TAC impacts would occur during construction of the proposed project from DPM emissions.

Asbestos Emissions

It is possible that the existing onsite structures to be demolished contains asbestos. According to SCAQMD Rule 1403 requirements, prior to the start of demolition activities, the existing structures located onsite shall be thoroughly surveyed for the presence of asbestos by a person that is certified by Cal/OSHA for asbestos surveys. Rule 1403 requires that the SCAQMD be notified a minimum of 10 days before any demolition activities begin with specific details of all asbestos to be removed, start and completion dates of demolition, work practices and engineering controls to be used to contain the asbestos emissions, estimates on the amount of asbestos to be removed, the name of the waste disposal site where the asbestos will be taken, and names and addresses of all contractors and transporters that will be involved in the asbestos removal process. Therefore, through adherence to the asbestos removal requirements, detailed in SCAQMD Rule 1403, a less than significant asbestos impact 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 ongoing 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 in Section 10.3 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 in Section 10.3 found that the operation of the proposed project would not exceed the local NOx, CO, PM10 and PM2.5 thresholds of significance discussed above in Section 9.2. 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.

Operations-Related Toxic Air Contaminant Impacts

The proposed project consists of development of truck trailer parking that would generate DPM emissions from diesel truck operations, which are known sources of TACs. The TAC impacts to the nearby sensitive receptors have been analyzed through use of the AERMOD model and the model input parameters detailed above in Section 8.3. Health risks from TACs are twofold. First, TACs are carcinogens according to the State of California. Second, short-term acute and long-term chronic exposure to TACs can cause health effects to the respiratory system. Each of these health risks is discussed below.

Cancer Risks

According to the OEHHA Guidance (OEHHA, 2015) and *Risk Assessment Procedures for Rules 1401, 1401.1 and 212*, (SCAQMD, 2017), the cancer risk should be calculated using the following formula:

Cancer Risk = [Dose-inh (mg/(Kg-day)] * [Cancer Potency Factor (kg-day)/mg]*[1x10^6] * Age Sensitivity Factor * Fraction of Time at Home

$$\text{Dose-inh} = (C_{air} * DBR * A * EF * ED * 10^6) / AT$$

Where:

C_{air} [Concentration in air (µg/m^3)] = (Calculated by AERMOD Model)

DBR [Daily breathing rate (L/kg body weight – day)]

A [Inhalation absorption factor]

EF [Exposure frequency (days/year)]

ED [Exposure duration (years)]

10^6 [Micrograms to milligrams conversion]

AT [Average time period over which exposure is averaged in days]

The cancer risk parameters used in this evaluation for the nearby residential uses are shown in Table S.

Table S – Cancer Risk Calculation Parameters

Parameter	Operations		
	2025 – 2027 (3rd Trimester to 2 years)	2028 – 2042 (2 to 16 years)	2043 – 2054 (16 to 30 years)
Cancer Potency Factor (mg/kg-day) for DPM	1.1	1.1	1.1
Daily Breathing Rate (L/kg body weight-day)	1,009(1)	572	261
Inhalation Absorption Factor	1	1	1
Exposure Frequency (days/year)	350	350	350
Exposure Duration (years)	2.25	14	13.75
Age Sensitivity Factor	10	3	1
Fraction of Time at Home	1.0	1.0	1.0
Averaging Time[2] (days)	25,550	25,550	25,550
Potential Cancer Risk =	C_{air} * 342	C_{air} * 362	C_{air} * 39.5

Notes:
[1] Based on 95th percentile breathing rate of 361 for 3rd trimester for 3 months and 1,090 for 0 to 2 years for 24 months (OEHHA, 2015; SCAQMD, 2017).
[2] Based on a 70-year average lifetime (OEHHA, 2015; SCAQMD, 2017)

Table T provides a summary of the calculated diesel emission concentrations at the nearest sensitive receptors. Appendices D, E, and F provide the AERMOD printouts.

Table T – Project Operational DPM Emissions Cancer Risks at Nearby Sensitive Receptors

Sensitive Receptor[1]	Receptor Location		Annual PM10 Concentration (µg/m³)			Cancer Risk Per Million People[2]
	X	Y	2025-2027	2028-2042	2043-2054	
1	453,686	3,773,179	0.0002	0.0002	0.0001	0.1
2	453,688	3,773,152	0.0003	0.0002	0.0002	0.2
3	453,686	3,773,120	0.0003	0.0002	0.0002	0.2
4	453,679	3,773,083	0.0002	0.0002	0.0001	0.1
5	453,679	3,772,996	0.0003	0.0002	0.0002	0.2
6	453,680	3,772,917	0.0003	0.0002	0.0002	0.2
7	453,719	3,772,952	0.0005	0.0003	0.0003	0.3
8	453,724	3,772,915	0.0004	0.0003	0.0003	0.3
9	453,723	3,772,873	0.0005	0.0004	0.0003	0.3
10	453,751	3,772,848	0.0007	0.0005	0.0004	0.4
11	453,750	3,772,828	0.0018	0.0012	0.0010	1.1
12	453,820	3,772,909	0.0003	0.0002	0.0002	0.2
13	454,356	3,772,894	0.0004	0.0003	0.0003	0.3
				SCAQMD Threshold of Significance		**10**
				Exceed Threshold?		**No**

Notes:
[1] The locations of each Sensitive Receptor are shown above in Figure 4.
[2] The residential cancer risk based on: C_{air} (2025-2027) * 342 + C_{air} (2028-2042) * 362 + C_{air} (2043-2054) * 39.5.
Source: Calculated from ISC-AERMOD View Version 12.0.0.

Table T shows that the cancer risk from the proposed project's DPM emissions would be as high as 1.1 per million persons at the nearest home, located northwest of the project site. The TAC concentrations at the nearby sensitive receptors would be within the SCAQMD's threshold of 10 per million persons. Therefore, operation of the proposed project would result in a less than significant impact due to the cancer risk from TAC emissions.

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 chronic illnesses, which is detailed below. According to the OEHHA, no acute risk had been found to be created from DPM, so there is no acute AREL assigned to DPM, and no further analysis is provided as no acute impact would be created from the DPM emissions created by the proposed project.

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 has established this concentration as protective for the respiratory system. As shown above in Table T, the AERMOD model found that the highest annual off-site concentration from either construction or operation of the proposed project is 0.0018 $\mu g/m^3$ for DPM chronic non-cancer risk emissions. The resulting Hazard Index is:

$$HI_{DPM} = 0.0018 / 5 = 0.00035$$

The criterion for significance is a Chronic Hazard Index increase of 1.0 or greater, which is detailed above in Section 9.3. Therefore, construction and operation 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.

Therefore, operation of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Level of Significance

Less than significant impact.

10.5 Odor Emissions

The proposed project would not result in other emissions, such as those leading to odors that would adversely affect a substantial number of people. The local concentrations of criteria pollutant emissions, TAC emissions, and CO concentrations that may adversely impact a substantial number of people have been analyzed above in Section 10.4 for both construction and operations, which found that these types of emissions would create less than significant impacts. As such, the following analysis is limited to odors that would have the potential to adversely affect 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 truck trailer parking facility. Operation of the proposed project may create odors from diesel-powered trucks and from trash storage bins. Pursuant to County regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Diesel truck emissions odors would be generated intermittently from truck trailer pickup and drop-off activities at the project site and would not likely be noticeable for extended periods of time beyond the project site boundaries. Due to the distance

of the nearest receptors from the proposed trash enclosure on the eastern portion of the project site and through compliance with SCAQMD's Rule 402 and County 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.

Level of Significance

Less than significant impact

10.6 Energy Consumption

The proposed project would impact energy resources during construction and operation. Energy resources that would be potentially impacted include electricity, natural gas, and petroleum-based fuel supplies and distribution systems. This analysis includes a discussion of the potential energy impacts of the proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. A general definition of each of these energy resources is provided below.

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands. In 2022, San Bernardino County consumed 16,630 Gigawatt-hours per year of electricity[4].

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the State, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network and, therefore, resource availability is typically not an issue. Natural gas satisfies almost one-third of the State's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet. In 2022, San Bernardino County consumed 562.1 Million Therms of natural gas[5].

Petroleum-based fuels currently account for a majority of California's transportation energy sources and primarily consist of diesel and gasoline types of fuels. However, the state has been working on developing strategies to reduce petroleum use. Over the last decade California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, petroleum-based fuel consumption in California has declined. In 2023, 897 million gallons of gasoline and 267 million gallons of diesel was sold in San Bernardino County[6].

4 Obtained from: http://www.ecdms.energy.ca.gov/elecbycounty.aspx
5 Obtained from: http://www.ecdms.energy.ca.gov/gasbycounty.aspx
6 Obtained from: : https://www.energy.ca.gov/media/3874

The following section calculates the potential energy consumption associated with the construction and operations of the proposed project and provides a determination if any energy utilized by the proposed project is wasteful, inefficient, or unnecessary consumption of energy resources.

Construction Energy

The construction activities for the proposed project are anticipated to include demolition of the existing structures on the project site, site preparation and grading of the 5.22-acre project site, building construction of the maintenance shop and office building, paving of the truck trailer storage yard and auto parking area, and application of architectural coatings. The proposed project would consume energy resources during construction in three (3) general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, as well as delivery and haul truck trips (e.g., hauling of material to disposal facilities);
2. Electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power; and,
3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction-Related Electricity

During construction the proposed project would consume electricity to construct the proposed warehouse and infrastructure. Electricity would be supplied to the project site by Southern California Edison and would be obtained from the existing electrical lines in the vicinity of the project site. The use of electricity from existing power lines rather than temporary diesel or gasoline powered generators would minimize impacts on fuel consumption. Electricity consumed during project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the proposed project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during project construction would not be wasteful, inefficient, or unnecessary.

Since there are currently power lines that serve the project site, it is anticipated that only nominal improvements would be required to Southern California Edison distribution lines and equipment with development of the proposed project. Compliance with County's guidelines and requirements would ensure that the proposed project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction of the project. Construction of the project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Construction-Related Natural Gas

Construction of the proposed project typically would not involve the consumption of natural gas. Natural gas would not be supplied to support construction activities, thus there would be no demand generated by construction. Since the project site currently has natural gas service to the project site, construction of the proposed project would be limited to installation of new natural gas connections within the project site. Development of the proposed project would likely not require extensive infrastructure improvements to serve the project site. Construction-related energy usage impacts associated with the installation of natural gas connections are expected to be confined to trenching in order to place the lines below surface. In addition, prior to ground disturbance, the proposed project would notify and coordinate with SoCal Gas to identify the locations and depth of all existing gas lines and avoid disruption of gas service. Therefore, construction-related impacts to natural gas supply and infrastructure would be less than significant.

Construction-Related Petroleum Fuel Use

Petroleum-based fuel usage represents the highest amount of transportation energy potentially consumed during construction, which would be utilized by both off-road equipment operating on the project site and on-road automobiles transporting workers to and from the project site and on-road trucks transporting equipment and supplies to the project site.

The off-road construction equipment fuel usage was calculated through use of the off-road equipment assumptions and fuel use assumptions shown above in Section 8.2, which found that construction of the proposed project would consume approximately 1,220 gallons of gasoline and 36,058 gallons of diesel fuel. This equates to 0.0001 percent of the gasoline and 0.014 percent of the diesel used annually in San Bernardino County. As such, the construction-related petroleum use would be nominal, when compared to current county-wide petroleum usage rates.

Construction activities associated with the proposed project would be required to adhere to all State and SCAQMD regulations for off-road equipment and on-road trucks, which provide minimum fuel efficiency standards. As such, construction activities for the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources. Impacts regarding transportation energy would be less than significant. Development of the project would not result in the need to manufacture construction materials or create new building material facilities specifically to supply the proposed project. It is difficult to measure the energy used in the production of construction materials such as asphalt, steel, and concrete, it is reasonable to assume that the production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business.

Operational Energy

The on-going operation of the proposed project would require the use of energy resources for multiple purposes including, but not limited to, heating/ventilating/air conditioning (HVAC), refrigeration, lighting, appliances, and electronics. Energy would also be consumed during operations related to water usage, solid waste disposal, landscape equipment, and vehicle trips.

Operations-Related Electricity

Operation of the proposed project would result in consumption of electricity at the project site that would be provided by Southern California Edison (SCE). The *Edison International 2023 Sustainability Report*,

details that in 2023, SCE delivered 52 percent of its power from carbon free sources and SCE is committed to and on track to delivering 100 percent carbon free power by 2045.

As detailed above in Section 8.3 the proposed project would consume approximately 296,116 kilowatt-hours per year of electricity. This equates to 0.0018 percent of the electricity consumed annually in San Bernardino County. As such, the operations-related electricity use would be nominal, when compared to current electricity usage rates in the County.

It should be noted that, the proposed project would comply with all Federal, State, and County requirements related to the consumption of electricity, that includes CCR Title 24, Part 6 *Building Energy Efficiency Standards* and CCR Title 24, Part 11: *California Green Building Standards.* The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed structures, including enhanced insulation, use of energy efficient lighting and appliances as well as designing the structures to be capable of handling future solar PV systems and battery storage systems and requiring a variety of other energy-efficiency measures to be incorporated into the proposed structures. Therefore, it is anticipated the proposed project will be designed and built to minimize electricity use through use of enhanced insulation and use of energy efficient lighting and appliances and that existing and planned electricity capacity and electricity supplies would be sufficient to support the proposed project's electricity demand. Thus, the project would not result in the wasteful or inefficient use of electricity and no mitigation measures would be required.

Operations-Related Natural Gas

Operation of the proposed project would result in increased consumption of natural gas at the project site. As detailed above in Section 8.3 the proposed project would consume approximately 206 MBTU per year of natural gas. This equates to 0.00037 percent of the natural gas consumed annually in San Bernardino County. As such, the operations-related natural gas use would be nominal, when compared to current natural gas usage rates in the County.

It should be noted that, the proposed project would comply with all Federal, State, and County requirements related to the consumption of natural gas, that includes CCR Title 24, Part 6 *Building Energy Efficiency Standards* and CCR Title 24, Part 11: *California Green Building Standards.* The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed structures, including enhanced insulation as well as use of efficient natural gas appliances and HVAC units. Therefore, it is anticipated the proposed project will be designed and built to minimize natural gas use and that existing and planned natural gas capacity and natural gas supplies would be sufficient to support the proposed project's natural gas demand. Thus, impacts with regard to natural gas supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

Operations-Related Vehicular Petroleum Fuel Usage

Operation of the proposed project would result in increased consumption of petroleum-based fuels related to vehicular travel to and from the project site. As detailed above in Section 8.2 the proposed project would consume approximately 6,091 gallons of gasoline per year from automobile vehicle travel and 51,285 gallons of diesel per year from truck travel. This equates to 0.0006 percent of the gasoline and 0.019 percent of the diesel consumed annually in San Bernardino County. As such, the operations-related petroleum use would be nominal, when compared to current petroleum usage rates.

It should be noted that the proposed project will be designed and built to minimize transportation energy by locating a truck trailer storage facility in close proximity to existing rail yards and logistics warehouses, which would reduce truck travel times to existing truck trailer storage areas at the outer edges of the Air Basin and it is anticipated that existing and planned capacity and supplies of transportation fuels would be sufficient to support the proposed project's demand. Thus, impacts with regard transportation energy supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

In conclusion, the proposed project would comply with regulatory compliance measures outlined by the State and County related to Air Quality, GHG Emissions, Transportation/Circulation, and Water Supply. Additionally, the proposed project would be constructed in accordance with all applicable County Building and Fire Codes. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be less than significant.

Level of Significance

Less than significant impact.

10.7 Energy Plan Consistency

The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The applicable energy plan for the proposed project is the *County of San Bernardino General Plan Renewable Energy and Conservation Element*, Amended February 2019. The proposed project's consistency with the applicable energy-related policies in the General Plan are shown in Table U.

Table U – Proposed Project Compliance with Applicable General Plan Energy Policies

Policy No.	General Plan Policy	Proposed Project Implementation Actions
1.4	Encourage residents and businesses to conserve energy.	**Consistent.** The proposed structures will be designed to meet the most current Title 24 Part 6 building standards that require enhanced insulation in order to reduce energy usage that will conserve energy.
2.1	Support solar energy generation, solar water heating, wind energy and bioenergy systems that are consistent with the orientation, siting and environmental compatibility policies of the General Plan.	**Consistent.** The proposed structures will be designed to meet the most current Title 24 Part 6 building standards that require all new non-residential structures to be designed to be solar ready.
2.2	Promote use of energy storage technologies that are appropriate for the character of the proposed location.	**Consistent.** The proposed structures will be designed to meet the most current Title 24 Part 6 building standards that require the electrical system in non-residential buildings to be designed to handle future solar PV systems and battery storage systems.
2.3	Encourage the use of feasible emerging and experimental renewable energy technologies that are compatible with County regulatory standards.	**Consistent.** The proposed structures will be designed to meet the most current Title 24 Part 6 building standards that require the electrical system in non-residential buildings to be designed to handle future renewable energy technologies.

Policy No.	General Plan Policy	Proposed Project Implementation Actions
2.6	Encourage energy efficiency through appropriate renewable energy systems.	**Consistent.** The proposed structures will be designed to meet the most current Title 24 Part 6 building standards that require the electrical system in non-residential buildings to be designed to handle future solar PV systems and battery storage systems.
3.1	Prioritize, facilitate, and encourage onsite accessory RE generation to serve the unincorporated county, with a primary focus on rooftop and parking lot solar energy generation.	**Consistent.** The proposed structures will be designed to meet the most current Title 24 Part 6 building standards that require the electrical system in non-residential buildings to be designed to handle future solar PV systems and battery storage systems.

Source: County of San Bernardino, 2019.

As shown in Table U, the proposed project would be consistent with all applicable energy-related policies from the General Plan. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

Level of Significance

Less than significant impact.

10.8 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. The proposed project would consist of the development of a truck trailer parking facility. The proposed project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste disposal, water usage, refrigeration, and construction equipment. The project's GHG emissions have been calculated with the CalEEMod model based on the construction and operational parameters detailed in Section 8.1 above. A summary of the results is shown below in Table V and the CalEEMod model 2022.1 run annual printouts are provided in Appendix A.

Table V – Project Related Greenhouse Gas Annual Emissions

	Greenhouse Gas Emissions (Metric Tons per Year)			
Category	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Mobile Sources[1]	631	0.05	0.10	662
Area Sources[2]	0.15	<0.01	<0.01	0.15
Energy Usage[3]	57.7	0.01	<0.01	58.0
Water and Wastewater[4]	2.95	0.06	<0.01	4.8
Solid Waste[5]	0.83	0.08	0.00	2.9
Refrigeration[6]	--	--	--	0.32
Construction[7]	12.1	<0.01	<0.01	12.2
Proposed Project Total Emissions	705	0.2	0.1	**740**
County of San Bernardino GHG Emissions Reduction Plan Screening Threshold				**3,000**
Exceed Threshold?				**No**

Notes:
[1] Mobile sources consist of GHG emissions from vehicles.
[2] Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consists of GHG emissions from electricity and natural gas usage.
[4] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
[5] Waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.

[6] Refrigeration includes GHG emissions from refrigerants (unrefrigerated warehouse space not refrigerated).
[7] Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.
Source: CalEEMod Version 2022.1 (see Appendix A).

The data provided in Table V shows that the proposed project would create 740 $MTCO_2e$ per year. The County's GHG Emission Reduction Plan, small projects that do not exceed 3,000 $MTCO_2e$ per year will considered to be consistent with the Plan and determined to have a less than significant individual and cumulative impact for GHG emissions. Since the proposed project's GHG emissions are below the County's screening threshold, the proposed project would not create a significant cumulative impact from GHG emissions. Impacts would be less than significant.

Level of Significance

Less than significant impact.

10.9 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 in Section 10.8 above, the proposed project would create 740 $MTCO_2e$ per year, which is well below the 3,000 $MTCO_2e$ per year threshold provided in the GHG Review Processes. Therefore, 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. Impacts would be less than significant.

Level of Significance

Less than significant impact.

11.0 REFERENCES

California Air Pollution Control Officers Association, *California Emissions Estimator Model (CalEEMod) User Guide Version 2022.1*, April 2022.

California Air Resources Board, *2017 Off-Road Diesel Emission Factor Update for NOx and PM,* 2017.

California Air Resources Board, *Appendix VII Risk Characterization Scenarios,* October 2000.

California Air Resources Board, *California's 2017 Climate Change Scoping Plan,* November 2017.

California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2020 Trends of Emissions and Other Indicators,* October 26, 2022.

California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality,* November 16, 2022.

California Air Resources Board, *First Update to the Climate Change Scoping Plan,* May 2014.

California Air Resources Board, *Resolution 08-43,* December 12, 2008.

California Air Resources Board, *Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act,* on October 24, 2008.

California Air Resources Board, *Final Staff Report Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets*, October 2017.

California Air Resources Board, *The California Almanac of Emissions and Air Quality 2013 Edition*.

California Building Standards Commission, *2022 California Green Building Standards Code CALGreen,* 2022.

California Department of Conservation, *A General Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos,* August, 2000.

California Energy Commission, *2022 Reference Appendices for the 2022 Building Energy Efficiency Standards,* August 2022.

California Natural Resources Agency, *2022 California Environmental Quality Act (CEQA) Statute and Guidelines*, Association of Environmental Professionals, 2022.

County of San Bernardino, *County of San Bernardino General Plan Renewable Energy and Conservation Element,* Amended February 2019.

County of San Bernardino, *County of San Bernardino Greenhouse Gas Emissions Reduction Plan,* September, 2011.

County of San Bernardino, *Greenhouse Gas Emissions Development Review Processes County of San Bernardino, California,* March 2015.

Environmental Protection Agency, *AERMOD Implementation Guide,* July 2021.

Environmental Protection Agency, *AMS/EPA Regulatory Model (AERMOD) version 23132,* 2023.

Environmental Protection Agency, *Nonattainment Major New Source Review Implementation Under 8-Hour Ozone National Ambient Air Quality Standard: Reconsideration*, June 30, 2005.

Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2021,* April, 2023.

Lakes Software, *AERMOD View Gaussian Plume Air Dispersion Model Version 12.0.0*, 2023.

Office of Environmental Health Hazard Assessment (OEHHA), *Air Toxics Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments,* February 2015

RK Engineering Group, Inc., *Whittram Avenue Truck Trailer Parking Lot Project Trip Generation and VMT Screening Analysis, County of San Bernardino,* August 29, 2023.

San Joaquin Valley Air Pollution Control District, *Guidance for Air Dispersion Modeling.* January 2007.

South Coast Air Quality Management District, *2007 Air Quality Management Plan,* June 1, 2007.

South Coast Air Quality Management District, *Appendix A Calculation Details for CalEEMod,* February 2011.

South Coast Air Quality Management District, *CEQA Air Quality Handbook, April 1993.*

South Coast Air Quality Management District, *2022 Air Quality Management Plan,* December 2, 2022.

South Coast Air Quality Management District, *Final 2012 Air Quality Management Plan,* December, 2012.

South Coast Air Quality Management District, *Final 2016 Air Quality Management Plan,* March, 2017.

South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, Revised July 2008.

South Coast Air Quality Management District, *Revised Draft – 2012 Lead State Implementation Plan Los Angeles County,* May 4, 2012.

South Coast Air Quality Management District, *Rule 402 Nuisance,* Adopted May 7, 1976.

South Coast Air Quality Management District, *Rule 403 Fugitive Dust,* Amended June 3, 2005.

South Coast Air Quality Management District, *Rule 1108 Cutback Asphalt,* Amended February 1, 1985.

South Coast Air Quality Management District, *Rule 1108.1 Emulsified Asphalt,* Amended November 4, 1983.

South Coast Air Quality Management District, *Rule 1113 Architectural Coatings,* Amended September 6, 2013.

South Coast Air Quality Management District, *Rule 1143 Consumer Paint Thinners & Multi-Purpose Solvents,* Amended December 3, 2010.

South Coast Air Quality Management District, *Rule 1403 Asbestos Emissions from Demolition/ Renovation Activities,* Amended October 5, 2007.

South Coast Air Quality Management District, *SCAQMD Air Quality Significance Thresholds,* March 2015.

South Coast Air Quality Management District, *Draft Report Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES III*, January 2008.

South Coast Air Quality Management District, *Draft Report Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES-IV*, October 2014.

South Coast Air Quality Management District, *MATES V Multiple Air Toxics Exposure Study in the South Coast AQMD Final Report*, August 2021.

South Coast Air Quality Management District, *WAIRE Implementation Guidelines*, June 2021.

Southern California Association of Governments, *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (Connect SoCal), September 3, 2020.

Southern California Association of Governments, *2019 Federal Transportation Improvement Program (FTIP) Guidelines*, September 2018.

University of California, Davis, *Transportation Project-Level Carbon Monoxide Protocol,* December 1997.

U.S. Geological Survey, *Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California,* 2011.

APPENDIX A

CalEEMod Model Printouts

Whittram Avenue Truck Trailer Parking Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Whittram Avenue Truck Trailer Parking
Construction Start Date	6/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	6.40
Location	34.09540971624379, -117.50038621673185
County	San Bernardino-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5286
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Industrial Park	7.50	1000sqft	0.89	7,500	6,682	—	—	—
Parking Lot	156	Space	4.33	0.00	32,608	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.23	36.1	34.4	0.05	1.60	6.44	8.04	1.47	2.79	4.26	5,556	0.23	0.06	1.18	5,578
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.22	11.3	13.3	0.02	0.50	0.05	0.55	0.46	0.01	0.47	2,478	0.10	0.03	0.01	2,488
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.83	6.49	6.96	0.01	0.29	0.44	0.73	0.26	0.15	0.41	1,216	0.05	0.01	0.09	1,222
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15	1.18	1.27	< 0.005	0.05	0.08	0.13	0.05	0.03	0.07	201	0.01	< 0.005	0.02	202
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—

Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.74	36.1	34.4	0.05	1.60	6.44	8.04	1.47	2.79	4.26	5,556	0.23	0.06	1.18	5,578
2025	6.23	10.5	13.3	0.02	0.43	0.20	0.54	0.40	0.05	0.41	2,480	0.10	0.03	0.78	2,491
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.22	11.3	13.3	0.02	0.50	0.05	0.55	0.46	0.01	0.47	2,478	0.10	0.03	0.01	2,488
2025	1.14	10.5	13.2	0.02	0.43	0.05	0.48	0.40	0.01	0.41	2,476	0.10	0.03	0.01	2,487
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.69	6.49	6.96	0.01	0.29	0.44	0.73	0.26	0.15	0.41	1,216	0.05	0.01	0.09	1,222
2025	0.83	4.20	5.38	0.01	0.17	0.03	0.20	0.16	0.01	0.17	984	0.04	0.01	0.06	988
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.13	1.18	1.27	< 0.005	0.05	0.08	0.13	0.05	0.03	0.07	201	0.01	< 0.005	0.02	202
2025	0.15	0.77	0.98	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	163	0.01	< 0.005	0.01	164

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	4.43	2.78	0.03	0.05	1.07	1.12	0.05	0.28	0.34	4,184	1.18	0.59	11.7	4,401
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30	4.62	2.49	0.03	0.05	1.07	1.12	0.05	0.28	0.33	4,184	1.18	0.59	2.21	4,392
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34	4.64	2.69	0.03	0.05	1.07	1.12	0.05	0.28	0.33	4,184	1.18	0.59	6.18	4,395
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.85	0.49	0.01	0.01	0.19	0.20	0.01	0.05	0.06	693	0.19	0.10	1.02	728
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,000
Unmit.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.10	4.37	2.41	0.03	0.05	1.07	1.12	0.05	0.28	0.33	3,811	0.30	0.58	9.80	4,000
Area	0.26	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.34	< 0.005	< 0.005	—	1.35
Energy	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	349	0.03	< 0.005	—	351
Water	—	—	—	—	—	—	—	—	—	—	17.8	0.34	0.01	—	28.8
Waste	—	—	—	—	—	—	—	—	—	—	5.01	0.50	0.00	—	17.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	1.95	1.95
Total	0.36	4.43	2.78	0.03	0.05	1.07	1.12	0.05	0.28	0.34	4,184	1.18	0.59	11.7	4,401
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.09	4.56	2.44	0.03	0.05	1.07	1.12	0.05	0.28	0.33	3,813	0.30	0.58	0.25	3,993
Area	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	349	0.03	< 0.005	—	351
Water	—	—	—	—	—	—	—	—	—	—	17.8	0.34	0.01	—	28.8
Waste	—	—	—	—	—	—	—	—	—	—	5.01	0.50	0.00	—	17.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	1.95	1.95
Total	0.30	4.62	2.49	0.03	0.05	1.07	1.12	0.05	0.28	0.33	4,184	1.18	0.59	2.21	4,392
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.09	4.58	2.42	0.03	0.05	1.07	1.11	0.05	0.28	0.33	3,811	0.30	0.58	4.23	3,996
Area	0.25	< 0.005	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.92	< 0.005	< 0.005	—	0.92
Energy	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	349	0.03	< 0.005	—	351
Water	—	—	—	—	—	—	—	—	—	—	17.8	0.34	0.01	—	28.8
Waste	—	—	—	—	—	—	—	—	—	—	5.01	0.50	0.00	—	17.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	1.95	1.95

Total	0.34	4.64	2.69	0.03	0.05	1.07	1.12	0.05	0.28	0.33	4,184	1.18	0.59	6.18	4,395
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.02	0.84	0.44	0.01	0.01	0.19	0.20	0.01	0.05	0.06	631	0.05	0.10	0.70	662
Area	0.04	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.15	< 0.005	< 0.005	—	0.15
Energy	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	57.7	0.01	< 0.005	—	58.0
Water	—	—	—	—	—	—	—	—	—	—	2.95	0.06	< 0.005	—	4.77
Waste	—	—	—	—	—	—	—	—	—	—	0.83	0.08	0.00	—	2.90
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	0.06	0.85	0.49	0.01	0.01	0.19	0.20	0.01	0.05	0.06	693	0.19	0.10	1.02	728

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—
Onsite truck	< 0.005	0.04	0.04	< 0.005	< 0.005	1.10	1.10	< 0.005	0.11	0.11	7.93	< 0.005	< 0.005	0.01	8.42
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.14	1.36	1.19	< 0.005	0.06	—	0.06	0.05	—	0.05	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	0.44	< 0.005	< 0.005	< 0.005	0.46
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.25	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.07	< 0.005	< 0.005	< 0.005	0.08
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.27	0.00	0.00	0.20	0.20	0.00	0.05	0.05	216	0.01	0.01	0.86	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.18	0.10	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	148	0.02	0.02	0.31	156
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8.10	< 0.005	< 0.005	0.01	8.52
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.82	< 0.005	< 0.005	< 0.005	1.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.34	< 0.005	< 0.005	< 0.005	1.41

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—
Onsite truck	< 0.005	0.04	0.04	< 0.005	< 0.005	1.10	1.10	< 0.005	0.11	0.11	7.93	< 0.005	< 0.005	0.01	8.42
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.99	0.90	< 0.005	0.04	—	0.04	0.04	—	0.04	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	0.14	0.14	—	0.07	0.07	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	0.22	< 0.005	< 0.005	< 0.005	0.23
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.04	< 0.005	< 0.005	< 0.005	0.04
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	1.48	0.00	0.00	0.23	0.23	0.00	0.05	0.05	252	0.01	0.01	1.01	256
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.42	< 0.005	< 0.005	0.01	6.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.06	< 0.005	< 0.005	< 0.005	1.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—
Onsite truck	< 0.005	0.04	0.04	< 0.005	< 0.005	1.10	1.10	< 0.005	0.11	0.11	7.93	< 0.005	< 0.005	0.01	8.42
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	1.00	1.03	< 0.005	0.05	—	0.05	0.04	—	0.04	162	0.01	< 0.005	—	163
Dust From Material Movement	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	0.44	< 0.005	< 0.005	< 0.005	0.46
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	26.8	< 0.005	< 0.005	—	26.9
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.07	< 0.005	< 0.005	< 0.005	0.08
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.27	0.00	0.00	0.20	0.20	0.00	0.05	0.05	216	0.01	0.01	0.86	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	11.0	< 0.005	< 0.005	0.02	11.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.82	< 0.005	< 0.005	< 0.005	1.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	3.10	3.62	0.01	0.14	—	0.14	0.13	—	0.13	662	0.03	0.01	—	664
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.57	0.66	< 0.005	0.03	—	0.03	0.02	—	0.02	110	< 0.005	< 0.005	—	110
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.27	0.00	0.00	0.04	0.04	0.00	0.01	0.01	45.3	< 0.005	< 0.005	0.18	46.0
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	38.5	< 0.005	0.01	0.11	40.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.6	< 0.005	< 0.005	< 0.005	42.1
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	38.6	< 0.005	0.01	< 0.005	40.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	11.6	< 0.005	< 0.005	0.02	11.8
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.6	< 0.005	< 0.005	0.01	11.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.93	< 0.005	< 0.005	< 0.005	1.95

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.76	< 0.005	< 0.005	< 0.005	1.84
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	3.72	4.64	0.01	0.15	—	0.15	0.14	—	0.14	854	0.03	0.01	—	857
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.68	0.85	< 0.005	0.03	—	0.03	0.03	—	0.03	141	0.01	< 0.005	—	142
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.25	0.00	0.00	0.04	0.04	0.00	0.01	0.01	44.4	< 0.005	< 0.005	0.16	45.1
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	37.9	< 0.005	0.01	0.11	39.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	40.7	< 0.005	< 0.005	< 0.005	41.2
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	37.9	< 0.005	0.01	< 0.005	39.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	14.7	< 0.005	< 0.005	0.03	14.9
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	13.5	< 0.005	< 0.005	0.02	14.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.43	< 0.005	< 0.005	< 0.005	2.47
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.24	< 0.005	< 0.005	< 0.005	2.34
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	1,511	0.06	0.01	—	1,517
Paving	0.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.41	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	82.8	< 0.005	< 0.005	—	83.1
Paving	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.7	< 0.005	< 0.005	—	13.8
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	1.17	0.00	0.00	0.20	0.20	0.00	0.05	0.05	211	0.01	0.01	0.78	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.78	< 0.005	< 0.005	< 0.005	1.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	134	0.01	< 0.005	—	134
Architectural Coatings	6.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.88	< 0.005	< 0.005	0.03	9.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.45	< 0.005	< 0.005	< 0.005	0.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.07	< 0.005	< 0.005	< 0.005	0.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.92	< 0.005	< 0.005	0.01	2.95
Parking Lot	0.10	4.37	2.40	0.03	0.05	1.07	1.11	0.05	0.28	0.33	3,808	0.30	0.58	9.78	3,997
Total	0.10	4.37	2.41	0.03	0.05	1.07	1.12	0.05	0.28	0.33	3,811	0.30	0.58	9.80	4,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.66	< 0.005	< 0.005	< 0.005	2.68
Parking Lot	0.09	4.56	2.43	0.03	0.05	1.07	1.11	0.05	0.28	0.33	3,810	0.30	0.58	0.25	3,990
Total	0.09	4.56	2.44	0.03	0.05	1.07	1.12	0.05	0.28	0.33	3,813	0.30	0.58	0.25	3,993
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.45	< 0.005	< 0.005	< 0.005	0.45
Parking Lot	0.02	0.84	0.44	0.01	0.01	0.19	0.20	0.01	0.05	0.06	631	0.05	0.10	0.70	661
Total	0.02	0.84	0.44	0.01	0.01	0.19	0.20	0.01	0.05	0.06	631	0.05	0.10	0.70	662

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	125	0.01	< 0.005	—	126
Parking Lot	—	—	—	—	—	—	—	—	—	—	158	0.01	< 0.005	—	159
Total	—	—	—	—	—	—	—	—	—	—	283	0.03	< 0.005	—	284
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	125	0.01	< 0.005	—	126
Parking Lot	—	—	—	—	—	—	—	—	—	—	158	0.01	< 0.005	—	159
Total	—	—	—	—	—	—	—	—	—	—	283	0.03	< 0.005	—	284
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	20.7	< 0.005	< 0.005	—	20.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	26.1	< 0.005	< 0.005	—	26.3
Total	—	—	—	—	—	—	—	—	—	—	46.8	< 0.005	< 0.005	—	47.1

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	66.0	0.01	< 0.005	—	66.1
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	66.0	0.01	< 0.005	—	66.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	66.0	0.01	< 0.005	—	66.1
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	66.0	0.01	< 0.005	—	66.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.9	< 0.005	< 0.005	—	11.0
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.9	< 0.005	< 0.005	—	11.0

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.34	< 0.005	< 0.005	—	1.35
Total	0.26	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.34	< 0.005	< 0.005	—	1.35

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.15	< 0.005	< 0.005	—	0.15
Total	0.04	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.15	< 0.005	< 0.005	—	0.15

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	15.1	0.34	0.01	—	26.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	2.65	< 0.005	< 0.005	—	2.67
Total	—	—	—	—	—	—	—	—	—	—	17.8	0.34	0.01	—	28.8

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	15.1	0.34	0.01	—	26.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	2.65	< 0.005	< 0.005	—	2.67
Total	—	—	—	—	—	—	—	—	—	—	17.8	0.34	0.01	—	28.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	2.51	0.06	< 0.005	—	4.33
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.44	< 0.005	< 0.005	—	0.44
Total	—	—	—	—	—	—	—	—	—	—	2.95	0.06	< 0.005	—	4.77

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	5.01	0.50	0.00	—	17.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	5.01	0.50	0.00	—	17.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	5.01	0.50	0.00	—	17.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	5.01	0.50	0.00	—	17.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	0.83	0.08	0.00	—	2.90
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.83	0.08	0.00	—	2.90

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	1.95	1.95
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	1.95	1.95
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	1.95	1.95
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	1.95	1.95
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	0.32	0.32

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	6/1/2024	6/29/2024	5.00	20.0	—
Site Preparation	Site Preparation	6/30/2024	7/14/2024	5.00	10.0	—
Grading	Grading	7/15/2024	8/12/2024	5.00	20.0	—

Building Construction	Building Construction	8/13/2024	7/1/2025	5.00	230	—
Paving	Paving	7/2/2025	7/30/2025	5.00	20.0	—
Architectural Coating	Architectural Coating	7/31/2025	8/28/2025	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	2.10	20.0	HHDT
Demolition	Onsite truck	3.00	0.25	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	3.00	0.25	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	3.00	0.25	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3.15	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	1.23	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—

Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.63	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	11,250	3,750	11,317

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	3,600	—
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	4.33

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	4.33	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Industrial Park	47.9	47.9	47.9	17,465	459	459	459	167,360
Parking Lot	129	129	129	47,260	1,241	1,241	1,241	452,869

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	11,250	3,750	11,317

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Industrial Park	130,889	349	0.0330	0.0040	205,800
Parking Lot	165,227	349	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	1,734,375	107,307
Parking Lot	0.00	523,656

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	9.30	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.1	annual days of extreme heat

Extreme Precipitation	5.30	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	95.3
AQ-PM	93.5
AQ-DPM	89.8
Drinking Water	66.7
Lead Risk Housing	48.2
Pesticides	0.00

Toxic Releases	75.3
Traffic	70.0
Effect Indicators	—
CleanUp Sites	86.3
Groundwater	30.9
Haz Waste Facilities/Generators	97.5
Impaired Water Bodies	0.00
Solid Waste	95.4
Sensitive Population	—
Asthma	72.1
Cardio-vascular	85.8
Low Birth Weights	31.5
Socioeconomic Factor Indicators	—
Education	79.1
Housing	48.1
Linguistic	73.7
Poverty	73.3
Unemployment	85.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	19.81265238
Employed	14.93648146
Median HI	31.91325549
Education	—

Bachelor's or higher	4.824842808
High school enrollment	17.87501604
Preschool enrollment	64.42961632
Transportation	—
Auto Access	92.6344155
Active commuting	46.54176825
Social	—
2-parent households	66.99602207
Voting	15.74489927
Neighborhood	—
Alcohol availability	51.89272424
Park access	21.5193122
Retail density	38.36776594
Supermarket access	40.97266778
Tree canopy	5.51777236
Housing	—
Homeownership	52.16219684
Housing habitability	24.6888233
Low-inc homeowner severe housing cost burden	17.34890286
Low-inc renter severe housing cost burden	82.47144874
Uncrowded housing	10.95855255
Health Outcomes	—
Insured adults	8.392146798
Arthritis	41.4
Asthma ER Admissions	18.4
High Blood Pressure	53.6
Cancer (excluding skin)	68.9

Asthma	21.6
Coronary Heart Disease	40.3
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	27.5
Life Expectancy at Birth	23.5
Cognitively Disabled	24.2
Physically Disabled	50.9
Heart Attack ER Admissions	7.0
Mental Health Not Good	19.7
Chronic Kidney Disease	27.1
Obesity	22.5
Pedestrian Injuries	90.7
Physical Health Not Good	21.1
Stroke	34.3
Health Risk Behaviors	—
Binge Drinking	50.7
Current Smoker	20.8
No Leisure Time for Physical Activity	23.4
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	39.2
Elderly	91.2
English Speaking	19.9
Foreign-born	77.9
Outdoor Workers	50.5
Climate Change Adaptive Capacity	—

Impervious Surface Cover	77.1
Traffic Density	71.4
Traffic Access	46.8
Other Indices	—
Hardship	86.0
Other Decision Support	—
2016 Voting	29.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	93.0
Healthy Places Index Score for Project Location (b)	19.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Land Use	Total Project Site 5.22 acres. 39,290 sq ft landscaped
Operations: Vehicle Data	Trip Rates adjusted to match Traffic Study. Autos analyzed under Industrial Park and Trucks analyzed under Parking Lot
Operations: Fleet Mix	Industrial Park set to 100% Autos and Parking Lot set to 53.6% HHD (4-axle trucks) and 46.4% MHD (3-axle trucks)

APPENDIX B

EMFAC2017 Model Printouts

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: Air Basin
Region: SOUTH COAST
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day.

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	Fuel Consumption
SOUTH CO	2024	HHDT	Aggregatec	Aggregatec	GAS	73.4	8361	1468	1.9
SOUTH CO	2024	LDA	Aggregatec	Aggregatec	GAS	6543321.5	247047080	30912773	7604.7
SOUTH CO	2024	LDT1	Aggregatec	Aggregatec	GAS	758038.3	27517267	3506784	990.1
SOUTH CO	2024	LDT2	Aggregatec	Aggregatec	GAS	2256847.0	83361536	10593017	3162.7
SOUTH CO	2024	LHDT1	Aggregatec	Aggregatec	GAS	169468.4	5984463	2524826	556.7
SOUTH CO	2024	LHDT2	Aggregatec	Aggregatec	GAS	29259.5	998729	435923	106.8
SOUTH CO	2024	MCY	Aggregatec	Aggregatec	GAS	306168.3	2050950	612337	56.8
SOUTH CO	2024	MDV	Aggregatec	Aggregatec	GAS	1550012.1	53715244	7176828	2521.8
SOUTH CO	2024	MH	Aggregatec	Aggregatec	GAS	33327.2	318279	3334	60.1
SOUTH CO	2024	MHDT	Aggregatec	Aggregatec	GAS	25072.2	1303434	501644	250.5
SOUTH CO	2024	OBUS	Aggregatec	Aggregatec	GAS	5824.2	231713	116530	44.8
SOUTH CO	2024	SBUS	Aggregatec	Aggregatec	GAS	2862.3	111917	11449	12.1
SOUTH CO	2024	UBUS	Aggregatec	Aggregatec	GAS	963.4	90309	3854	17.1

vehicle miles per day (All Categories)	422739281	15,386	1,000 gall per day
		15,386,053	gallons per day

Fleet Avg Miles per gallon	27.5

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: Air Basin
Region: SOUTH COAST
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day.

Region	Calendar Ye	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption
SOUTH COA	2024	HHDT	Aggregated	Aggregated	DSL	102344	12300372.22	1038748.383	1709.317865
SOUTH COA	2024	LDA	Aggregated	Aggregated	DSL	63999.09	2508733.18	304606.8923	49.12629322
SOUTH COA	2024	LDT1	Aggregated	Aggregated	DSL	328.7785	7657.732481	1149.571462	0.330769625
SOUTH COA	2024	LDT2	Aggregated	Aggregated	DSL	16403	669969.5314	80362.13459	17.87387219
SOUTH COA	2024	LHDT1	Aggregated	Aggregated	DSL	127720.6	5014850.128	1606565.077	225.9441835
SOUTH COA	2024	LHDT2	Aggregated	Aggregated	DSL	51053.67	1946189.561	642190.897	97.15617885
SOUTH COA	2024	MDV	Aggregated	Aggregated	DSL	37681.45	1454315.296	183502.0999	50.53490296
SOUTH COA	2024	MH	Aggregated	Aggregated	DSL	12907.2	121381.1208	1290.719731	11.24099309
SOUTH COA	2024	MHDT	Aggregated	Aggregated	DSL	124152.6	8073271.593	1252041.102	712.0638793
SOUTH COA	2024	OBUS	Aggregated	Aggregated	DSL	4309.91	331727.9151	41803.48263	37.71954116
SOUTH COA	2024	SBUS	Aggregated	Aggregated	DSL	6430.31	203277.7694	74204.88878	26.12392829
SOUTH COA	2024	UBUS	Aggregated	Aggregated	DSL	10.42282	1204.585498	41.69128879	0.211140045

Diesel Truck (HHDT, MDV, MHDT) vehicle miles per day	21,827,959	2,472	1,000 gall per day
		2471916.647	gallons per day
Diesel Truck Fleet Avg Miles per gallon	8.8		

APPENDIX C

EMFAC2021 Model Printouts

EMFAC2021 Version 1.0.2

calendar year	season month	sub_area	vehicle class	fuel	temper	relative humidity	process	speed time	pollutant	emission rate
2050	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007503
2050	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004116
2050	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006783
2050	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.009864
2049	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007499
2049	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004117
2049	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.00678
2049	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.009874
2048	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007493
2048	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004117
2048	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006777
2048	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.009882
2047	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007489
2047	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004118
2047	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006773
2047	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.009896
2046	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007503
2046	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004122
2046	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006769
2046	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.009925
2045	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.00752
2045	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004127
2045	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006766
2045	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.009962
2044	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007538
2044	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004134
2044	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006764
2044	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.009993
2043	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007577
2043	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004146
2043	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006766
2043	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.010042
2042	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007616
2042	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.00416
2042	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006772
2042	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.010089
2041	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.00766
2041	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004178
2041	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006781
2041	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.010153
2040	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007717
2040	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004201
2040	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006797
2040	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.010241

calendar year	season month	sub_area	vehicle class	fuel	temper	relative humidity	process	speed time	pollutant	emission rate
2039	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007785
2039	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004229
2039	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006818
2039	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.010346
2038	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007858
2038	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004263
2038	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006846
2038	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.010462
2037	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.007958
2037	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004307
2037	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006883
2037	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.010595
2036	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008081
2036	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004362
2036	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006931
2036	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.010751
2035	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008258
2035	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004434
2035	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.006991
2035	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.010957
2034	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008497
2034	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004544
2034	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.007075
2034	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.011259
2033	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.008788
2033	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004675
2033	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.007175
2033	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.011622
2032	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.009123
2032	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004821
2032	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.007286
2032	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.012032
2031	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.009506
2031	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.004982
2031	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.007403
2031	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.012515
2030	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.010007
2030	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.005187
2030	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.00755
2030	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.013235
2029	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.010591
2029	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.005419
2029	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.007715
2029	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.014094
2028	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.011279

calendar year	season month	sub_area	vehicle class	fuel	temper	relative humidity	process	speed time	pollutant	emission rate
2028	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.005684
2028	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.007906
2028	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.015098
2027	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.01208
2027	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.005984
2027	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008125
2027	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.016208
2026	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.013104
2026	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.006372
2026	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008411
2026	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.017648
2025	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.014282
2025	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.006808
2025	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.008732
2025	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.019341
2024	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.015735
2024	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.007356
2024	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.009165
2024	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.021411
2023	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	10	PM10	0.017332
2023	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	25	PM10	0.00795
2023	Annual	San Bernardino (SC)	Truck2	Dsl	52	50	RUNEX	40	PM10	0.009615
2023	Annual	San Bernardino (SC)	Truck2	Dsl			IDLEX		PM10	0.023868

APPENDIX D

AERMOD Model Years 2025 – 2027 Operational PM10 Printouts

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 11/29/2023
** File: C:\Vista Env\2023\23038 SB Co\AERMOD\DPM25-27\DPM25-27.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE Whittram Ave Truck Trailer Parking - DPM 2025-2027
   TITLETWO PM10
   MODELOPT DFAULT CONC
   AVERTIME 24 PERIOD
   URBANOPT 2035210 San_Bernardino_Co
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL DPM25-27.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 = ONSITE
** DESCRSRC Onsite Truck Travel
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 3.76E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 5
** 453990.577, 3772819.679, 351.94, 0.00, 1.70
** 453978.661, 3772846.382, 352.00, 0.00, 1.70
** 453941.746, 3772845.252, 351.99, 0.00, 1.70
** 453884.663, 3772818.370, 351.00, 0.00, 1.70
** 453707.327, 3772815.608, 350.48, 0.00, 1.70
** ------------------------------------------------------------------------
   LOCATION L0000417     VOLUME   453989.831 3772821.349 352.00
```

LOCATION L0000418 VOLUME 453988.341 3772824.689 352.00
LOCATION L0000419 VOLUME 453986.851 3772828.029 352.00
LOCATION L0000420 VOLUME 453985.360 3772831.369 352.00
LOCATION L0000421 VOLUME 453983.870 3772834.709 352.00
LOCATION L0000422 VOLUME 453982.379 3772838.050 352.00
LOCATION L0000423 VOLUME 453980.889 3772841.390 352.00
LOCATION L0000424 VOLUME 453979.398 3772844.730 352.00
LOCATION L0000425 VOLUME 453976.814 3772846.325 352.00
LOCATION L0000426 VOLUME 453973.158 3772846.213 352.00
LOCATION L0000427 VOLUME 453969.502 3772846.101 352.00
LOCATION L0000428 VOLUME 453965.846 3772845.990 352.00
LOCATION L0000429 VOLUME 453962.190 3772845.878 352.00
LOCATION L0000430 VOLUME 453958.534 3772845.766 351.99
LOCATION L0000431 VOLUME 453954.878 3772845.654 351.99
LOCATION L0000432 VOLUME 453951.222 3772845.542 351.98
LOCATION L0000433 VOLUME 453947.566 3772845.430 351.98
LOCATION L0000434 VOLUME 453943.911 3772845.318 351.97
LOCATION L0000435 VOLUME 453940.396 3772844.616 351.94
LOCATION L0000436 VOLUME 453937.087 3772843.058 351.89
LOCATION L0000437 VOLUME 453933.778 3772841.499 351.84
LOCATION L0000438 VOLUME 453930.469 3772839.941 351.79
LOCATION L0000439 VOLUME 453927.160 3772838.383 351.73
LOCATION L0000440 VOLUME 453923.851 3772836.824 351.68
LOCATION L0000441 VOLUME 453920.542 3772835.266 351.63
LOCATION L0000442 VOLUME 453917.233 3772833.708 351.58
LOCATION L0000443 VOLUME 453913.924 3772832.149 351.53
LOCATION L0000444 VOLUME 453910.615 3772830.591 351.47
LOCATION L0000445 VOLUME 453907.306 3772829.033 351.42
LOCATION L0000446 VOLUME 453903.997 3772827.475 351.37
LOCATION L0000447 VOLUME 453900.688 3772825.916 351.32
LOCATION L0000448 VOLUME 453897.379 3772824.358 351.27
LOCATION L0000449 VOLUME 453894.070 3772822.800 351.22
LOCATION L0000450 VOLUME 453890.761 3772821.241 351.16
LOCATION L0000451 VOLUME 453887.452 3772819.683 351.11
LOCATION L0000452 VOLUME 453884.088 3772818.361 351.07
LOCATION L0000453 VOLUME 453880.431 3772818.304 351.07
LOCATION L0000454 VOLUME 453876.774 3772818.247 351.06
LOCATION L0000455 VOLUME 453873.116 3772818.190 351.06
LOCATION L0000456 VOLUME 453869.459 3772818.133 351.06
LOCATION L0000457 VOLUME 453865.802 3772818.076 351.06
LOCATION L0000458 VOLUME 453862.145 3772818.019 351.06
LOCATION L0000459 VOLUME 453858.488 3772817.962 351.05
LOCATION L0000460 VOLUME 453854.831 3772817.905 351.05
LOCATION L0000461 VOLUME 453851.174 3772817.848 351.05
LOCATION L0000462 VOLUME 453847.516 3772817.791 351.04
LOCATION L0000463 VOLUME 453843.859 3772817.734 351.04
LOCATION L0000464 VOLUME 453840.202 3772817.677 351.03
LOCATION L0000465 VOLUME 453836.545 3772817.620 351.02
LOCATION L0000466 VOLUME 453832.888 3772817.563 351.02
LOCATION L0000467 VOLUME 453829.231 3772817.506 351.01
LOCATION L0000468 VOLUME 453825.573 3772817.449 351.01
LOCATION L0000469 VOLUME 453821.916 3772817.392 351.00
LOCATION L0000470 VOLUME 453818.259 3772817.335 351.00
LOCATION L0000471 VOLUME 453814.602 3772817.279 351.00

```
   LOCATION L0000472     VOLUME   453810.945 3772817.222 351.00
   LOCATION L0000473     VOLUME   453807.288 3772817.165 351.00
   LOCATION L0000474     VOLUME   453803.630 3772817.108 351.00
   LOCATION L0000475     VOLUME   453799.973 3772817.051 351.00
   LOCATION L0000476     VOLUME   453796.316 3772816.994 351.00
   LOCATION L0000477     VOLUME   453792.659 3772816.937 350.83
   LOCATION L0000478     VOLUME   453789.002 3772816.880 350.83
   LOCATION L0000479     VOLUME   453785.345 3772816.823 350.83
   LOCATION L0000480     VOLUME   453781.688 3772816.766 350.83
   LOCATION L0000481     VOLUME   453778.030 3772816.709 350.83
   LOCATION L0000482     VOLUME   453774.373 3772816.652 350.83
   LOCATION L0000483     VOLUME   453770.716 3772816.595 350.83
   LOCATION L0000484     VOLUME   453767.059 3772816.538 350.83
   LOCATION L0000485     VOLUME   453763.402 3772816.481 350.83
   LOCATION L0000486     VOLUME   453759.745 3772816.424 350.83
   LOCATION L0000487     VOLUME   453756.087 3772816.367 350.79
   LOCATION L0000488     VOLUME   453752.430 3772816.310 350.75
   LOCATION L0000489     VOLUME   453748.773 3772816.253 350.71
   LOCATION L0000490     VOLUME   453745.116 3772816.196 350.68
   LOCATION L0000491     VOLUME   453741.459 3772816.140 350.64
   LOCATION L0000492     VOLUME   453737.802 3772816.083 350.60
   LOCATION L0000493     VOLUME   453734.145 3772816.026 350.56
   LOCATION L0000494     VOLUME   453730.487 3772815.969 350.53
   LOCATION L0000495     VOLUME   453726.830 3772815.912 350.52
   LOCATION L0000496     VOLUME   453723.173 3772815.855 350.51
   LOCATION L0000497     VOLUME   453719.516 3772815.798 350.51
   LOCATION L0000498     VOLUME   453715.859 3772815.741 350.51
   LOCATION L0000499     VOLUME   453712.202 3772815.684 350.51
   LOCATION L0000500     VOLUME   453708.544 3772815.627 350.51
** End of LINE VOLUME Source ID = ONSITE
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = CALAB
** DESCRSRC Calabash Ave Truck Travel
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 1.16E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 453703.599, 3772815.829, 350.51, 0.00, 1.70
** 453707.056, 3773206.209, 355.97, 0.00, 1.70
** ----------------------------------------------------------------------
   LOCATION L0000501     VOLUME   453703.615 3772817.658 350.54
   LOCATION L0000502     VOLUME   453703.647 3772821.316 350.58
   LOCATION L0000503     VOLUME   453703.680 3772824.973 350.62
   LOCATION L0000504     VOLUME   453703.712 3772828.631 350.66
   LOCATION L0000505     VOLUME   453703.744 3772832.288 350.70
   LOCATION L0000506     VOLUME   453703.777 3772835.945 350.75
   LOCATION L0000507     VOLUME   453703.809 3772839.603 350.79
   LOCATION L0000508     VOLUME   453703.842 3772843.260 350.83
   LOCATION L0000509     VOLUME   453703.874 3772846.918 350.87
   LOCATION L0000510     VOLUME   453703.906 3772850.575 350.91
```

LOCATION L0000511 VOLUME 453703.939 3772854.233 350.95
LOCATION L0000512 VOLUME 453703.971 3772857.890 350.99
LOCATION L0000513 VOLUME 453704.004 3772861.548 351.02
LOCATION L0000514 VOLUME 453704.036 3772865.205 351.06
LOCATION L0000515 VOLUME 453704.068 3772868.863 351.10
LOCATION L0000516 VOLUME 453704.101 3772872.520 351.14
LOCATION L0000517 VOLUME 453704.133 3772876.177 351.17
LOCATION L0000518 VOLUME 453704.166 3772879.835 351.21
LOCATION L0000519 VOLUME 453704.198 3772883.492 351.25
LOCATION L0000520 VOLUME 453704.230 3772887.150 351.29
LOCATION L0000521 VOLUME 453704.263 3772890.807 351.32
LOCATION L0000522 VOLUME 453704.295 3772894.465 351.36
LOCATION L0000523 VOLUME 453704.327 3772898.122 351.40
LOCATION L0000524 VOLUME 453704.360 3772901.780 351.44
LOCATION L0000525 VOLUME 453704.392 3772905.437 351.47
LOCATION L0000526 VOLUME 453704.425 3772909.095 351.51
LOCATION L0000527 VOLUME 453704.457 3772912.752 351.55
LOCATION L0000528 VOLUME 453704.489 3772916.410 351.59
LOCATION L0000529 VOLUME 453704.522 3772920.067 351.62
LOCATION L0000530 VOLUME 453704.554 3772923.724 351.66
LOCATION L0000531 VOLUME 453704.587 3772927.382 351.70
LOCATION L0000532 VOLUME 453704.619 3772931.039 351.74
LOCATION L0000533 VOLUME 453704.651 3772934.697 351.77
LOCATION L0000534 VOLUME 453704.684 3772938.354 351.83
LOCATION L0000535 VOLUME 453704.716 3772942.012 351.90
LOCATION L0000536 VOLUME 453704.749 3772945.669 351.97
LOCATION L0000537 VOLUME 453704.781 3772949.327 352.03
LOCATION L0000538 VOLUME 453704.813 3772952.984 352.10
LOCATION L0000539 VOLUME 453704.846 3772956.642 352.17
LOCATION L0000540 VOLUME 453704.878 3772960.299 352.24
LOCATION L0000541 VOLUME 453704.910 3772963.956 352.30
LOCATION L0000542 VOLUME 453704.943 3772967.614 352.36
LOCATION L0000543 VOLUME 453704.975 3772971.271 352.41
LOCATION L0000544 VOLUME 453705.008 3772974.929 352.45
LOCATION L0000545 VOLUME 453705.040 3772978.586 352.50
LOCATION L0000546 VOLUME 453705.072 3772982.244 352.54
LOCATION L0000547 VOLUME 453705.105 3772985.901 352.58
LOCATION L0000548 VOLUME 453705.137 3772989.559 352.63
LOCATION L0000549 VOLUME 453705.170 3772993.216 352.67
LOCATION L0000550 VOLUME 453705.202 3772996.874 352.72
LOCATION L0000551 VOLUME 453705.234 3773000.531 352.79
LOCATION L0000552 VOLUME 453705.267 3773004.188 352.86
LOCATION L0000553 VOLUME 453705.299 3773007.846 352.92
LOCATION L0000554 VOLUME 453705.332 3773011.503 352.99
LOCATION L0000555 VOLUME 453705.364 3773015.161 353.06
LOCATION L0000556 VOLUME 453705.396 3773018.818 353.13
LOCATION L0000557 VOLUME 453705.429 3773022.476 353.19
LOCATION L0000558 VOLUME 453705.461 3773026.133 353.26
LOCATION L0000559 VOLUME 453705.494 3773029.791 353.30
LOCATION L0000560 VOLUME 453705.526 3773033.448 353.34
LOCATION L0000561 VOLUME 453705.558 3773037.106 353.37
LOCATION L0000562 VOLUME 453705.591 3773040.763 353.41
LOCATION L0000563 VOLUME 453705.623 3773044.420 353.45
LOCATION L0000564 VOLUME 453705.655 3773048.078 353.48

```
   LOCATION L0000565     VOLUME   453705.688 3773051.735 353.52
   LOCATION L0000566     VOLUME   453705.720 3773055.393 353.56
   LOCATION L0000567     VOLUME   453705.753 3773059.050 353.62
   LOCATION L0000568     VOLUME   453705.785 3773062.708 353.70
   LOCATION L0000569     VOLUME   453705.817 3773066.365 353.77
   LOCATION L0000570     VOLUME   453705.850 3773070.023 353.85
   LOCATION L0000571     VOLUME   453705.882 3773073.680 353.92
   LOCATION L0000572     VOLUME   453705.915 3773077.338 353.99
   LOCATION L0000573     VOLUME   453705.947 3773080.995 354.07
   LOCATION L0000574     VOLUME   453705.979 3773084.653 354.14
   LOCATION L0000575     VOLUME   453706.012 3773088.310 354.20
   LOCATION L0000576     VOLUME   453706.044 3773091.967 354.23
   LOCATION L0000577     VOLUME   453706.077 3773095.625 354.27
   LOCATION L0000578     VOLUME   453706.109 3773099.282 354.31
   LOCATION L0000579     VOLUME   453706.141 3773102.940 354.35
   LOCATION L0000580     VOLUME   453706.174 3773106.597 354.38
   LOCATION L0000581     VOLUME   453706.206 3773110.255 354.42
   LOCATION L0000582     VOLUME   453706.238 3773113.912 354.46
   LOCATION L0000583     VOLUME   453706.271 3773117.570 354.50
   LOCATION L0000584     VOLUME   453706.303 3773121.227 354.54
   LOCATION L0000585     VOLUME   453706.336 3773124.885 354.59
   LOCATION L0000586     VOLUME   453706.368 3773128.542 354.63
   LOCATION L0000587     VOLUME   453706.400 3773132.199 354.68
   LOCATION L0000588     VOLUME   453706.433 3773135.857 354.73
   LOCATION L0000589     VOLUME   453706.465 3773139.514 354.77
   LOCATION L0000590     VOLUME   453706.498 3773143.172 354.82
   LOCATION L0000591     VOLUME   453706.530 3773146.829 354.87
   LOCATION L0000592     VOLUME   453706.562 3773150.487 354.93
   LOCATION L0000593     VOLUME   453706.595 3773154.144 355.00
   LOCATION L0000594     VOLUME   453706.627 3773157.802 355.06
   LOCATION L0000595     VOLUME   453706.660 3773161.459 355.13
   LOCATION L0000596     VOLUME   453706.692 3773165.117 355.20
   LOCATION L0000597     VOLUME   453706.724 3773168.774 355.26
   LOCATION L0000598     VOLUME   453706.757 3773172.431 355.33
   LOCATION L0000599     VOLUME   453706.789 3773176.089 355.39
   LOCATION L0000600     VOLUME   453706.822 3773179.746 355.47
   LOCATION L0000601     VOLUME   453706.854 3773183.404 355.54
   LOCATION L0000602     VOLUME   453706.886 3773187.061 355.61
   LOCATION L0000603     VOLUME   453706.919 3773190.719 355.69
   LOCATION L0000604     VOLUME   453706.951 3773194.376 355.76
   LOCATION L0000605     VOLUME   453706.983 3773198.034 355.84
   LOCATION L0000606     VOLUME   453707.016 3773201.691 355.91
   LOCATION L0000607     VOLUME   453707.048 3773205.349 355.99
** End of LINE VOLUME Source ID = CALAB
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = WHITT
** DESCRSRC Whittram Ave Truck Travel
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 1.61E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
```

```
** Nodes = 10
** 453993.318, 3772814.475, 351.94, 0.00, 5.67
** 454020.960, 3772827.703, 351.93, 0.00, 5.67
** 454038.928, 3772836.245, 352.00, 0.00, 5.67
** 454065.585, 3772847.290, 352.00, 0.00, 5.67
** 454091.505, 3772855.832, 352.00, 0.00, 5.67
** 454113.640, 3772862.734, 352.60, 0.00, 5.67
** 454158.171, 3772870.705, 352.87, 0.00, 5.67
** 454192.132, 3772874.517, 353.00, 0.00, 5.67
** 454225.162, 3772875.759, 353.43, 0.00, 5.67
** 454393.010, 3772876.322, 355.00, 0.00, 5.67
** ------------------------------------------------------------------
   LOCATION L0000608     VOLUME   453998.817 3772817.106 352.00
   LOCATION L0000609     VOLUME   454009.815 3772822.369 352.00
   LOCATION L0000610     VOLUME   454020.812 3772827.632 352.00
   LOCATION L0000611     VOLUME   454031.823 3772832.867 352.00
   LOCATION L0000612     VOLUME   454042.924 3772837.900 352.00
   LOCATION L0000613     VOLUME   454054.187 3772842.568 352.00
   LOCATION L0000614     VOLUME   454065.450 3772847.235 352.03
   LOCATION L0000615     VOLUME   454077.026 3772851.061 352.16
   LOCATION L0000616     VOLUME   454088.605 3772854.877 352.28
   LOCATION L0000617     VOLUME   454100.230 3772858.553 352.41
   LOCATION L0000618     VOLUME   454111.869 3772862.182 352.53
   LOCATION L0000619     VOLUME   454123.815 3772864.556 352.61
   LOCATION L0000620     VOLUME   454135.817 3772866.704 352.68
   LOCATION L0000621     VOLUME   454147.818 3772868.852 352.75
   LOCATION L0000622     VOLUME   454159.835 3772870.892 352.88
   LOCATION L0000623     VOLUME   454171.951 3772872.251 352.97
   LOCATION L0000624     VOLUME   454184.067 3772873.611 353.00
   LOCATION L0000625     VOLUME   454196.205 3772874.670 353.00
   LOCATION L0000626     VOLUME   454208.388 3772875.128 353.00
   LOCATION L0000627     VOLUME   454220.572 3772875.586 353.36
   LOCATION L0000628     VOLUME   454232.761 3772875.784 353.76
   LOCATION L0000629     VOLUME   454244.953 3772875.825 353.99
   LOCATION L0000630     VOLUME   454257.144 3772875.866 354.00
   LOCATION L0000631     VOLUME   454269.336 3772875.907 354.01
   LOCATION L0000632     VOLUME   454281.528 3772875.948 354.01
   LOCATION L0000633     VOLUME   454293.720 3772875.989 354.01
   LOCATION L0000634     VOLUME   454305.912 3772876.030 354.22
   LOCATION L0000635     VOLUME   454318.104 3772876.071 354.62
   LOCATION L0000636     VOLUME   454330.296 3772876.112 355.00
   LOCATION L0000637     VOLUME   454342.488 3772876.153 355.00
   LOCATION L0000638     VOLUME   454354.680 3772876.194 355.00
   LOCATION L0000639     VOLUME   454366.872 3772876.235 355.00
   LOCATION L0000640     VOLUME   454379.064 3772876.276 355.00
   LOCATION L0000641     VOLUME   454391.256 3772876.317 355.00
** End of LINE VOLUME Source ID = WHITT
   LOCATION IDLE         POINT      453883.040  3772831.670      351.510
** DESCRSRC Onsite Truck Idling
** Source Parameters **
** LINE VOLUME Source ID = ONSITE
   SRCPARAM L0000417     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000418     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000419     0.00000004476      0.00      1.70      0.85
```

```
SRCPARAM L0000420     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000421     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000422     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000423     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000424     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000425     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000426     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000427     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000428     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000429     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000430     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000431     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000432     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000433     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000434     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000435     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000436     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000437     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000438     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000439     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000440     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000441     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000442     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000443     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000444     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000445     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000446     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000447     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000448     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000449     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000450     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000451     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000452     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000453     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000454     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000455     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000456     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000457     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000458     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000459     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000460     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000461     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000462     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000463     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000464     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000465     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000466     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000467     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000468     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000469     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000470     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000471     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000472     0.00000004476      0.00      1.70      0.85
SRCPARAM L0000473     0.00000004476      0.00      1.70      0.85
```

```
   SRCPARAM L0000474     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000475     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000476     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000477     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000478     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000479     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000480     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000481     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000482     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000483     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000484     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000485     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000486     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000487     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000488     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000489     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000490     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000491     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000492     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000493     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000494     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000495     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000496     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000497     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000498     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000499     0.00000004476      0.00      1.70      0.85
   SRCPARAM L0000500     0.00000004476      0.00      1.70      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = CALAB
   SRCPARAM L0000501     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000502     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000503     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000504     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000505     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000506     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000507     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000508     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000509     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000510     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000511     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000512     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000513     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000514     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000515     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000516     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000517     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000518     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000519     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000520     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000521     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000522     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000523     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000524     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000525     0.00000001084      0.00      1.70      0.85
```

```
SRCPARAM L0000526     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000527     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000528     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000529     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000530     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000531     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000532     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000533     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000534     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000535     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000536     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000537     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000538     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000539     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000540     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000541     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000542     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000543     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000544     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000545     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000546     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000547     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000548     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000549     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000550     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000551     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000552     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000553     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000554     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000555     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000556     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000557     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000558     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000559     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000560     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000561     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000562     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000563     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000564     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000565     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000566     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000567     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000568     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000569     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000570     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000571     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000572     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000573     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000574     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000575     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000576     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000577     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000578     0.00000001084      0.00      1.70      0.85
SRCPARAM L0000579     0.00000001084      0.00      1.70      0.85
```

```
   SRCPARAM L0000580     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000581     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000582     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000583     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000584     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000585     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000586     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000587     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000588     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000589     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000590     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000591     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000592     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000593     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000594     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000595     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000596     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000597     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000598     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000599     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000600     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000601     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000602     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000603     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000604     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000605     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000606     0.00000001084      0.00      1.70      0.85
   SRCPARAM L0000607     0.00000001084      0.00      1.70      0.85
** ----------------------------------------------------------------------
** LINE VOLUME Source ID = WHITT
   SRCPARAM L0000608     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000609     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000610     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000611     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000612     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000613     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000614     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000615     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000616     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000617     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000618     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000619     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000620     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000621     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000622     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000623     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000624     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000625     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000626     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000627     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000628     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000629     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000630     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000631     0.00000004735      0.00      5.67      0.85
```

```
   SRCPARAM L0000632     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000633     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000634     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000635     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000636     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000637     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000638     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000639     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000640     0.00000004735      0.00      5.67      0.85
   SRCPARAM L0000641     0.00000004735      0.00      5.67      0.85
** ------------------------------------------------------------------
   SRCPARAM IDLE          2.22E-06     3.840   366.000        50       0.1
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED DPM25-27.rou
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\FontanaADJU\FONT_V9_ADJU\FONT_v9.SFC
   PROFFILE ..\FontanaADJU\FONT_V9_ADJU\FONT_v9.PFL
   SURFDATA 3102 2011 Fontana_Station
   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 DPM25-27.AD\24H1GALL.PLT 31
   PLOTFILE PERIOD ALL DPM25-27.AD\PE00GALL.PLT 32
   SUMMFILE DPM25-27.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
**
```

* MODELING OPTIONS USED: RegDFAULT CONC ELEV URBAN ADJ_U*
* PLOT FILE OF PERIOD VALUES AVERAGED ACROSS 0 YEARS FOR SOURCE GROUP: ALL
* FOR A TOTAL OF 13 RECEPTORS.
* FORMAT: (3(1X,F13.5),3(1X,F8.2),2X,A6,2X,A8,2X,I8.8,2X,A8)

* X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM HRS	NET ID
453686.00000	3773179.00000	0.00022	355.31	355.31	0.00	PERIOD	ALL	00043848	
453688.00000	3773152.00000	0.00028	354.88	354.88	0.00	PERIOD	ALL	00043848	
453686.00000	3773120.00000	0.00027	354.40	354.40	0.00	PERIOD	ALL	00043848	
453679.00000	3773083.00000	0.00022	353.92	353.92	0.00	PERIOD	ALL	00043848	
453679.00000	3772996.00000	0.00026	352.65	352.65	0.00	PERIOD	ALL	00043848	
453680.00000	3772917.00000	0.00031	351.41	351.41	0.00	PERIOD	ALL	00043848	
453719.00000	3772952.00000	0.00047	352.15	352.15	0.00	PERIOD	ALL	00043848	
453724.00000	3772915.00000	0.00042	351.77	351.77	0.00	PERIOD	ALL	00043848	
453723.00000	3772873.00000	0.00052	351.33	351.33	0.00	PERIOD	ALL	00043848	
453751.00000	3772848.00000	0.00069	351.15	351.15	0.00	PERIOD	ALL	00043848	
453750.00000	3772828.00000	0.00177	350.88	350.88	0.00	PERIOD	ALL	00043848	
453820.00000	3772909.00000	0.00030	352.09	352.09	0.00	PERIOD	ALL	00043848	
454356.00000	3772894.00000	0.00039	355.00	355.00	0.00	PERIOD	ALL	00043848	

** CONCUNIT ug/m^3
** DEPUNIT g/m^2

APPENDIX E

AERMOD Model Years 2028 – 2042 Operational PM10 Printouts

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 11/29/2023
** File: C:\Vista Env\2023\23038 SB Co\AERMOD\DPM28-42\DPM28-42.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE Whittram Ave Truck Trailer Parking - DPM 2028-2042
   TITLETWO PM10
   MODELOPT DFAULT CONC
   AVERTIME 24 PERIOD
   URBANOPT 2035210 San_Bernardino_Co
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL DPM28-42.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 = ONSITE
** DESCRSRC Onsite Truck Travel
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 2.49E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 5
** 453990.577, 3772819.679, 351.94, 0.00, 1.70
** 453978.661, 3772846.382, 352.00, 0.00, 1.70
** 453941.746, 3772845.252, 351.99, 0.00, 1.70
** 453884.663, 3772818.370, 351.00, 0.00, 1.70
** 453707.327, 3772815.608, 350.48, 0.00, 1.70
** ------------------------------------------------------------------------
   LOCATION L0000642     VOLUME   453989.831 3772821.349 352.00
```

LOCATION L0000643 VOLUME 453988.341 3772824.689 352.00
LOCATION L0000644 VOLUME 453986.851 3772828.029 352.00
LOCATION L0000645 VOLUME 453985.360 3772831.369 352.00
LOCATION L0000646 VOLUME 453983.870 3772834.709 352.00
LOCATION L0000647 VOLUME 453982.379 3772838.050 352.00
LOCATION L0000648 VOLUME 453980.889 3772841.390 352.00
LOCATION L0000649 VOLUME 453979.398 3772844.730 352.00
LOCATION L0000650 VOLUME 453976.814 3772846.325 352.00
LOCATION L0000651 VOLUME 453973.158 3772846.213 352.00
LOCATION L0000652 VOLUME 453969.502 3772846.101 352.00
LOCATION L0000653 VOLUME 453965.846 3772845.990 352.00
LOCATION L0000654 VOLUME 453962.190 3772845.878 352.00
LOCATION L0000655 VOLUME 453958.534 3772845.766 351.99
LOCATION L0000656 VOLUME 453954.878 3772845.654 351.99
LOCATION L0000657 VOLUME 453951.222 3772845.542 351.98
LOCATION L0000658 VOLUME 453947.566 3772845.430 351.98
LOCATION L0000659 VOLUME 453943.911 3772845.318 351.97
LOCATION L0000660 VOLUME 453940.396 3772844.616 351.94
LOCATION L0000661 VOLUME 453937.087 3772843.058 351.89
LOCATION L0000662 VOLUME 453933.778 3772841.499 351.84
LOCATION L0000663 VOLUME 453930.469 3772839.941 351.79
LOCATION L0000664 VOLUME 453927.160 3772838.383 351.73
LOCATION L0000665 VOLUME 453923.851 3772836.824 351.68
LOCATION L0000666 VOLUME 453920.542 3772835.266 351.63
LOCATION L0000667 VOLUME 453917.233 3772833.708 351.58
LOCATION L0000668 VOLUME 453913.924 3772832.149 351.53
LOCATION L0000669 VOLUME 453910.615 3772830.591 351.47
LOCATION L0000670 VOLUME 453907.306 3772829.033 351.42
LOCATION L0000671 VOLUME 453903.997 3772827.475 351.37
LOCATION L0000672 VOLUME 453900.688 3772825.916 351.32
LOCATION L0000673 VOLUME 453897.379 3772824.358 351.27
LOCATION L0000674 VOLUME 453894.070 3772822.800 351.22
LOCATION L0000675 VOLUME 453890.761 3772821.241 351.16
LOCATION L0000676 VOLUME 453887.452 3772819.683 351.11
LOCATION L0000677 VOLUME 453884.088 3772818.361 351.07
LOCATION L0000678 VOLUME 453880.431 3772818.304 351.07
LOCATION L0000679 VOLUME 453876.774 3772818.247 351.06
LOCATION L0000680 VOLUME 453873.116 3772818.190 351.06
LOCATION L0000681 VOLUME 453869.459 3772818.133 351.06
LOCATION L0000682 VOLUME 453865.802 3772818.076 351.06
LOCATION L0000683 VOLUME 453862.145 3772818.019 351.06
LOCATION L0000684 VOLUME 453858.488 3772817.962 351.05
LOCATION L0000685 VOLUME 453854.831 3772817.905 351.05
LOCATION L0000686 VOLUME 453851.174 3772817.848 351.05
LOCATION L0000687 VOLUME 453847.516 3772817.791 351.04
LOCATION L0000688 VOLUME 453843.859 3772817.734 351.04
LOCATION L0000689 VOLUME 453840.202 3772817.677 351.03
LOCATION L0000690 VOLUME 453836.545 3772817.620 351.02
LOCATION L0000691 VOLUME 453832.888 3772817.563 351.02
LOCATION L0000692 VOLUME 453829.231 3772817.506 351.01
LOCATION L0000693 VOLUME 453825.573 3772817.449 351.01
LOCATION L0000694 VOLUME 453821.916 3772817.392 351.00
LOCATION L0000695 VOLUME 453818.259 3772817.335 351.00
LOCATION L0000696 VOLUME 453814.602 3772817.279 351.00

```
   LOCATION L0000697     VOLUME   453810.945 3772817.222 351.00
   LOCATION L0000698     VOLUME   453807.288 3772817.165 351.00
   LOCATION L0000699     VOLUME   453803.630 3772817.108 351.00
   LOCATION L0000700     VOLUME   453799.973 3772817.051 351.00
   LOCATION L0000701     VOLUME   453796.316 3772816.994 351.00
   LOCATION L0000702     VOLUME   453792.659 3772816.937 350.83
   LOCATION L0000703     VOLUME   453789.002 3772816.880 350.83
   LOCATION L0000704     VOLUME   453785.345 3772816.823 350.83
   LOCATION L0000705     VOLUME   453781.688 3772816.766 350.83
   LOCATION L0000706     VOLUME   453778.030 3772816.709 350.83
   LOCATION L0000707     VOLUME   453774.373 3772816.652 350.83
   LOCATION L0000708     VOLUME   453770.716 3772816.595 350.83
   LOCATION L0000709     VOLUME   453767.059 3772816.538 350.83
   LOCATION L0000710     VOLUME   453763.402 3772816.481 350.83
   LOCATION L0000711     VOLUME   453759.745 3772816.424 350.83
   LOCATION L0000712     VOLUME   453756.087 3772816.367 350.79
   LOCATION L0000713     VOLUME   453752.430 3772816.310 350.75
   LOCATION L0000714     VOLUME   453748.773 3772816.253 350.71
   LOCATION L0000715     VOLUME   453745.116 3772816.196 350.68
   LOCATION L0000716     VOLUME   453741.459 3772816.140 350.64
   LOCATION L0000717     VOLUME   453737.802 3772816.083 350.60
   LOCATION L0000718     VOLUME   453734.145 3772816.026 350.56
   LOCATION L0000719     VOLUME   453730.487 3772815.969 350.53
   LOCATION L0000720     VOLUME   453726.830 3772815.912 350.52
   LOCATION L0000721     VOLUME   453723.173 3772815.855 350.51
   LOCATION L0000722     VOLUME   453719.516 3772815.798 350.51
   LOCATION L0000723     VOLUME   453715.859 3772815.741 350.51
   LOCATION L0000724     VOLUME   453712.202 3772815.684 350.51
   LOCATION L0000725     VOLUME   453708.544 3772815.627 350.51
** End of LINE VOLUME Source ID = ONSITE
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = CALAB
** DESCRSRC Calabash Ave Truck Travel
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 8.43E-07
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 453703.599, 3772815.829, 350.51, 0.00, 1.70
** 453707.056, 3773206.209, 355.97, 0.00, 1.70
** ----------------------------------------------------------------------
   LOCATION L0000726     VOLUME   453703.615 3772817.658 350.54
   LOCATION L0000727     VOLUME   453703.647 3772821.316 350.58
   LOCATION L0000728     VOLUME   453703.680 3772824.973 350.62
   LOCATION L0000729     VOLUME   453703.712 3772828.631 350.66
   LOCATION L0000730     VOLUME   453703.744 3772832.288 350.70
   LOCATION L0000731     VOLUME   453703.777 3772835.945 350.75
   LOCATION L0000732     VOLUME   453703.809 3772839.603 350.79
   LOCATION L0000733     VOLUME   453703.842 3772843.260 350.83
   LOCATION L0000734     VOLUME   453703.874 3772846.918 350.87
   LOCATION L0000735     VOLUME   453703.906 3772850.575 350.91
```

LOCATION L0000736 VOLUME 453703.939 3772854.233 350.95
LOCATION L0000737 VOLUME 453703.971 3772857.890 350.99
LOCATION L0000738 VOLUME 453704.004 3772861.548 351.02
LOCATION L0000739 VOLUME 453704.036 3772865.205 351.06
LOCATION L0000740 VOLUME 453704.068 3772868.863 351.10
LOCATION L0000741 VOLUME 453704.101 3772872.520 351.14
LOCATION L0000742 VOLUME 453704.133 3772876.177 351.17
LOCATION L0000743 VOLUME 453704.166 3772879.835 351.21
LOCATION L0000744 VOLUME 453704.198 3772883.492 351.25
LOCATION L0000745 VOLUME 453704.230 3772887.150 351.29
LOCATION L0000746 VOLUME 453704.263 3772890.807 351.32
LOCATION L0000747 VOLUME 453704.295 3772894.465 351.36
LOCATION L0000748 VOLUME 453704.327 3772898.122 351.40
LOCATION L0000749 VOLUME 453704.360 3772901.780 351.44
LOCATION L0000750 VOLUME 453704.392 3772905.437 351.47
LOCATION L0000751 VOLUME 453704.425 3772909.095 351.51
LOCATION L0000752 VOLUME 453704.457 3772912.752 351.55
LOCATION L0000753 VOLUME 453704.489 3772916.410 351.59
LOCATION L0000754 VOLUME 453704.522 3772920.067 351.62
LOCATION L0000755 VOLUME 453704.554 3772923.724 351.66
LOCATION L0000756 VOLUME 453704.587 3772927.382 351.70
LOCATION L0000757 VOLUME 453704.619 3772931.039 351.74
LOCATION L0000758 VOLUME 453704.651 3772934.697 351.77
LOCATION L0000759 VOLUME 453704.684 3772938.354 351.83
LOCATION L0000760 VOLUME 453704.716 3772942.012 351.90
LOCATION L0000761 VOLUME 453704.749 3772945.669 351.97
LOCATION L0000762 VOLUME 453704.781 3772949.327 352.03
LOCATION L0000763 VOLUME 453704.813 3772952.984 352.10
LOCATION L0000764 VOLUME 453704.846 3772956.642 352.17
LOCATION L0000765 VOLUME 453704.878 3772960.299 352.24
LOCATION L0000766 VOLUME 453704.910 3772963.956 352.30
LOCATION L0000767 VOLUME 453704.943 3772967.614 352.36
LOCATION L0000768 VOLUME 453704.975 3772971.271 352.41
LOCATION L0000769 VOLUME 453705.008 3772974.929 352.45
LOCATION L0000770 VOLUME 453705.040 3772978.586 352.50
LOCATION L0000771 VOLUME 453705.072 3772982.244 352.54
LOCATION L0000772 VOLUME 453705.105 3772985.901 352.58
LOCATION L0000773 VOLUME 453705.137 3772989.559 352.63
LOCATION L0000774 VOLUME 453705.170 3772993.216 352.67
LOCATION L0000775 VOLUME 453705.202 3772996.874 352.72
LOCATION L0000776 VOLUME 453705.234 3773000.531 352.79
LOCATION L0000777 VOLUME 453705.267 3773004.188 352.86
LOCATION L0000778 VOLUME 453705.299 3773007.846 352.92
LOCATION L0000779 VOLUME 453705.332 3773011.503 352.99
LOCATION L0000780 VOLUME 453705.364 3773015.161 353.06
LOCATION L0000781 VOLUME 453705.396 3773018.818 353.13
LOCATION L0000782 VOLUME 453705.429 3773022.476 353.19
LOCATION L0000783 VOLUME 453705.461 3773026.133 353.26
LOCATION L0000784 VOLUME 453705.494 3773029.791 353.30
LOCATION L0000785 VOLUME 453705.526 3773033.448 353.34
LOCATION L0000786 VOLUME 453705.558 3773037.106 353.37
LOCATION L0000787 VOLUME 453705.591 3773040.763 353.41
LOCATION L0000788 VOLUME 453705.623 3773044.420 353.45
LOCATION L0000789 VOLUME 453705.655 3773048.078 353.48

```
   LOCATION L0000790     VOLUME   453705.688 3773051.735 353.52
   LOCATION L0000791     VOLUME   453705.720 3773055.393 353.56
   LOCATION L0000792     VOLUME   453705.753 3773059.050 353.62
   LOCATION L0000793     VOLUME   453705.785 3773062.708 353.70
   LOCATION L0000794     VOLUME   453705.817 3773066.365 353.77
   LOCATION L0000795     VOLUME   453705.850 3773070.023 353.85
   LOCATION L0000796     VOLUME   453705.882 3773073.680 353.92
   LOCATION L0000797     VOLUME   453705.915 3773077.338 353.99
   LOCATION L0000798     VOLUME   453705.947 3773080.995 354.07
   LOCATION L0000799     VOLUME   453705.979 3773084.653 354.14
   LOCATION L0000800     VOLUME   453706.012 3773088.310 354.20
   LOCATION L0000801     VOLUME   453706.044 3773091.967 354.23
   LOCATION L0000802     VOLUME   453706.077 3773095.625 354.27
   LOCATION L0000803     VOLUME   453706.109 3773099.282 354.31
   LOCATION L0000804     VOLUME   453706.141 3773102.940 354.35
   LOCATION L0000805     VOLUME   453706.174 3773106.597 354.38
   LOCATION L0000806     VOLUME   453706.206 3773110.255 354.42
   LOCATION L0000807     VOLUME   453706.238 3773113.912 354.46
   LOCATION L0000808     VOLUME   453706.271 3773117.570 354.50
   LOCATION L0000809     VOLUME   453706.303 3773121.227 354.54
   LOCATION L0000810     VOLUME   453706.336 3773124.885 354.59
   LOCATION L0000811     VOLUME   453706.368 3773128.542 354.63
   LOCATION L0000812     VOLUME   453706.400 3773132.199 354.68
   LOCATION L0000813     VOLUME   453706.433 3773135.857 354.73
   LOCATION L0000814     VOLUME   453706.465 3773139.514 354.77
   LOCATION L0000815     VOLUME   453706.498 3773143.172 354.82
   LOCATION L0000816     VOLUME   453706.530 3773146.829 354.87
   LOCATION L0000817     VOLUME   453706.562 3773150.487 354.93
   LOCATION L0000818     VOLUME   453706.595 3773154.144 355.00
   LOCATION L0000819     VOLUME   453706.627 3773157.802 355.06
   LOCATION L0000820     VOLUME   453706.660 3773161.459 355.13
   LOCATION L0000821     VOLUME   453706.692 3773165.117 355.20
   LOCATION L0000822     VOLUME   453706.724 3773168.774 355.26
   LOCATION L0000823     VOLUME   453706.757 3773172.431 355.33
   LOCATION L0000824     VOLUME   453706.789 3773176.089 355.39
   LOCATION L0000825     VOLUME   453706.822 3773179.746 355.47
   LOCATION L0000826     VOLUME   453706.854 3773183.404 355.54
   LOCATION L0000827     VOLUME   453706.886 3773187.061 355.61
   LOCATION L0000828     VOLUME   453706.919 3773190.719 355.69
   LOCATION L0000829     VOLUME   453706.951 3773194.376 355.76
   LOCATION L0000830     VOLUME   453706.983 3773198.034 355.84
   LOCATION L0000831     VOLUME   453707.016 3773201.691 355.91
   LOCATION L0000832     VOLUME   453707.048 3773205.349 355.99
** End of LINE VOLUME Source ID = CALAB
** ------------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = WHITT
** DESCRSRC Whittram Ave Truck Travel
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 1.36E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
```

```
** Nodes = 10
** 453993.318, 3772814.475, 351.94, 0.00, 5.67
** 454020.960, 3772827.703, 351.93, 0.00, 5.67
** 454038.928, 3772836.245, 352.00, 0.00, 5.67
** 454065.585, 3772847.290, 352.00, 0.00, 5.67
** 454091.505, 3772855.832, 352.00, 0.00, 5.67
** 454113.640, 3772862.734, 352.60, 0.00, 5.67
** 454158.171, 3772870.705, 352.87, 0.00, 5.67
** 454192.132, 3772874.517, 353.00, 0.00, 5.67
** 454225.162, 3772875.759, 353.43, 0.00, 5.67
** 454393.010, 3772876.322, 355.00, 0.00, 5.67
** ------------------------------------------------------------------
   LOCATION L0000833     VOLUME   453998.817 3772817.106 352.00
   LOCATION L0000834     VOLUME   454009.815 3772822.369 352.00
   LOCATION L0000835     VOLUME   454020.812 3772827.632 352.00
   LOCATION L0000836     VOLUME   454031.823 3772832.867 352.00
   LOCATION L0000837     VOLUME   454042.924 3772837.900 352.00
   LOCATION L0000838     VOLUME   454054.187 3772842.568 352.00
   LOCATION L0000839     VOLUME   454065.450 3772847.235 352.03
   LOCATION L0000840     VOLUME   454077.026 3772851.061 352.16
   LOCATION L0000841     VOLUME   454088.605 3772854.877 352.28
   LOCATION L0000842     VOLUME   454100.230 3772858.553 352.41
   LOCATION L0000843     VOLUME   454111.869 3772862.182 352.53
   LOCATION L0000844     VOLUME   454123.815 3772864.556 352.61
   LOCATION L0000845     VOLUME   454135.817 3772866.704 352.68
   LOCATION L0000846     VOLUME   454147.818 3772868.852 352.75
   LOCATION L0000847     VOLUME   454159.835 3772870.892 352.88
   LOCATION L0000848     VOLUME   454171.951 3772872.251 352.97
   LOCATION L0000849     VOLUME   454184.067 3772873.611 353.00
   LOCATION L0000850     VOLUME   454196.205 3772874.670 353.00
   LOCATION L0000851     VOLUME   454208.388 3772875.128 353.00
   LOCATION L0000852     VOLUME   454220.572 3772875.586 353.36
   LOCATION L0000853     VOLUME   454232.761 3772875.784 353.76
   LOCATION L0000854     VOLUME   454244.953 3772875.825 353.99
   LOCATION L0000855     VOLUME   454257.144 3772875.866 354.00
   LOCATION L0000856     VOLUME   454269.336 3772875.907 354.01
   LOCATION L0000857     VOLUME   454281.528 3772875.948 354.01
   LOCATION L0000858     VOLUME   454293.720 3772875.989 354.01
   LOCATION L0000859     VOLUME   454305.912 3772876.030 354.22
   LOCATION L0000860     VOLUME   454318.104 3772876.071 354.62
   LOCATION L0000861     VOLUME   454330.296 3772876.112 355.00
   LOCATION L0000862     VOLUME   454342.488 3772876.153 355.00
   LOCATION L0000863     VOLUME   454354.680 3772876.194 355.00
   LOCATION L0000864     VOLUME   454366.872 3772876.235 355.00
   LOCATION L0000865     VOLUME   454379.064 3772876.276 355.00
   LOCATION L0000866     VOLUME   454391.256 3772876.317 355.00
** End of LINE VOLUME Source ID = WHITT
   LOCATION IDLE         POINT      453883.040  3772831.670      351.510
** DESCRSRC Onsite Truck Idling
** Source Parameters **
** LINE VOLUME Source ID = ONSITE
   SRCPARAM L0000642     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000643     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000644     0.00000002964      0.00      1.70      0.85
```

```
SRCPARAM L0000645     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000646     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000647     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000648     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000649     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000650     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000651     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000652     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000653     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000654     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000655     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000656     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000657     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000658     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000659     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000660     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000661     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000662     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000663     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000664     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000665     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000666     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000667     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000668     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000669     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000670     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000671     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000672     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000673     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000674     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000675     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000676     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000677     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000678     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000679     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000680     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000681     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000682     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000683     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000684     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000685     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000686     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000687     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000688     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000689     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000690     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000691     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000692     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000693     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000694     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000695     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000696     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000697     0.00000002964      0.00      1.70      0.85
SRCPARAM L0000698     0.00000002964      0.00      1.70      0.85
```

```
   SRCPARAM L0000699     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000700     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000701     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000702     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000703     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000704     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000705     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000706     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000707     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000708     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000709     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000710     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000711     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000712     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000713     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000714     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000715     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000716     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000717     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000718     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000719     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000720     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000721     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000722     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000723     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000724     0.00000002964      0.00      1.70      0.85
   SRCPARAM L0000725     0.00000002964      0.00      1.70      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = CALAB
   SRCPARAM L0000726     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000727     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000728     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000729     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000730     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000731     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000732     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000733     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000734     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000735     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000736     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000737     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000738     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000739     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000740     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000741     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000742     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000743     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000744     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000745     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000746     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000747     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000748     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000749     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000750     0.000000007879      0.00      1.70      0.85
```

```
SRCPARAM L0000751     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000752     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000753     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000754     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000755     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000756     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000757     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000758     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000759     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000760     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000761     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000762     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000763     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000764     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000765     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000766     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000767     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000768     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000769     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000770     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000771     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000772     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000773     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000774     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000775     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000776     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000777     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000778     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000779     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000780     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000781     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000782     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000783     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000784     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000785     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000786     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000787     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000788     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000789     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000790     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000791     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000792     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000793     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000794     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000795     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000796     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000797     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000798     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000799     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000800     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000801     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000802     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000803     0.000000007879      0.00      1.70      0.85
SRCPARAM L0000804     0.000000007879      0.00      1.70      0.85
```

```
   SRCPARAM L0000805     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000806     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000807     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000808     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000809     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000810     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000811     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000812     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000813     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000814     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000815     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000816     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000817     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000818     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000819     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000820     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000821     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000822     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000823     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000824     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000825     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000826     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000827     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000828     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000829     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000830     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000831     0.000000007879      0.00      1.70      0.85
   SRCPARAM L0000832     0.000000007879      0.00      1.70      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = WHITT
   SRCPARAM L0000833     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000834     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000835     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000836     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000837     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000838     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000839     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000840     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000841     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000842     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000843     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000844     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000845     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000846     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000847     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000848     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000849     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000850     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000851     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000852     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000853     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000854     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000855     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000856     0.00000004      0.00      5.67      0.85
```

```
   SRCPARAM L0000857     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000858     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000859     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000860     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000861     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000862     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000863     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000864     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000865     0.00000004      0.00      5.67      0.85
   SRCPARAM L0000866     0.00000004      0.00      5.67      0.85
** ----------------------------------------------------------------------
   SRCPARAM IDLE          1.45E-06     3.840   366.000        50       0.1
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED DPM28-42.rou
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\FontanaADJU\FONT_V9_ADJU\FONT_v9.SFC
   PROFFILE ..\FontanaADJU\FONT_V9_ADJU\FONT_v9.PFL
   SURFDATA 3102 2011 Fontana_Station
   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 DPM28-42.AD\24H1GALL.PLT 31
   PLOTFILE PERIOD ALL DPM28-42.AD\PE00GALL.PLT 32
   SUMMFILE DPM28-42.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
**
```

* MODELING OPTIONS USED: RegDFAULT CONC ELEV URBAN ADJ_U*
* PLOT FILE OF PERIOD VALUES AVERAGED ACROSS 0 YEARS FOR SOURCE GROUP: ALL
* FOR A TOTAL OF 13 RECEPTORS.
* FORMAT: (3(1X,F13.5),3(1X,F8.2),2X,A6,2X,A8,2X,I8.8,2X,A8)

* X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM HRS	NET ID
453686.00000	3773179.00000	0.00016	355.31	355.31	0.00	PERIOD	ALL	00043848	
453688.00000	3773152.00000	0.00020	354.88	354.88	0.00	PERIOD	ALL	00043848	
453686.00000	3773120.00000	0.00020	354.40	354.40	0.00	PERIOD	ALL	00043848	
453679.00000	3773083.00000	0.00016	353.92	353.92	0.00	PERIOD	ALL	00043848	
453679.00000	3772996.00000	0.00018	352.65	352.65	0.00	PERIOD	ALL	00043848	
453680.00000	3772917.00000	0.00022	351.41	351.41	0.00	PERIOD	ALL	00043848	
453719.00000	3772952.00000	0.00034	352.15	352.15	0.00	PERIOD	ALL	00043848	
453724.00000	3772915.00000	0.00029	351.77	351.77	0.00	PERIOD	ALL	00043848	
453723.00000	3772873.00000	0.00036	351.33	351.33	0.00	PERIOD	ALL	00043848	
453751.00000	3772848.00000	0.00046	351.15	351.15	0.00	PERIOD	ALL	00043848	
453750.00000	3772828.00000	0.00117	350.88	350.88	0.00	PERIOD	ALL	00043848	
453820.00000	3772909.00000	0.00020	352.09	352.09	0.00	PERIOD	ALL	00043848	
454356.00000	3772894.00000	0.00033	355.00	355.00	0.00	PERIOD	ALL	00043848	

** CONCUNIT ug/m^3
** DEPUNIT g/m^2

APPENDIX F

AERMOD Model Years 2043 – 2054 Operational PM10 Printouts

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 11/29/2023
** File: C:\Vista Env\2023\23038 SB Co\AERMOD\DPM43-54\DPM43-54.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE Whittram Ave Truck Trailer Parking - DPM 2043-2054
   TITLETWO PM10
   MODELOPT DFAULT CONC
   AVERTIME 24 PERIOD
   URBANOPT 2035210 San_Bernardino_Co
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL DPM43-54.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 = ONSITE
** DESCRSRC Onsite Truck Travel
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 2.15E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 5
** 453990.577, 3772819.679, 351.94, 0.00, 1.70
** 453978.661, 3772846.382, 352.00, 0.00, 1.70
** 453941.746, 3772845.252, 351.99, 0.00, 1.70
** 453884.663, 3772818.370, 351.00, 0.00, 1.70
** 453707.327, 3772815.608, 350.48, 0.00, 1.70
** ------------------------------------------------------------------------
   LOCATION L0000867     VOLUME   453989.831 3772821.349 352.00
```

LOCATION L0000868 VOLUME 453988.341 3772824.689 352.00
LOCATION L0000869 VOLUME 453986.851 3772828.029 352.00
LOCATION L0000870 VOLUME 453985.360 3772831.369 352.00
LOCATION L0000871 VOLUME 453983.870 3772834.709 352.00
LOCATION L0000872 VOLUME 453982.379 3772838.050 352.00
LOCATION L0000873 VOLUME 453980.889 3772841.390 352.00
LOCATION L0000874 VOLUME 453979.398 3772844.730 352.00
LOCATION L0000875 VOLUME 453976.814 3772846.325 352.00
LOCATION L0000876 VOLUME 453973.158 3772846.213 352.00
LOCATION L0000877 VOLUME 453969.502 3772846.101 352.00
LOCATION L0000878 VOLUME 453965.846 3772845.990 352.00
LOCATION L0000879 VOLUME 453962.190 3772845.878 352.00
LOCATION L0000880 VOLUME 453958.534 3772845.766 351.99
LOCATION L0000881 VOLUME 453954.878 3772845.654 351.99
LOCATION L0000882 VOLUME 453951.222 3772845.542 351.98
LOCATION L0000883 VOLUME 453947.566 3772845.430 351.98
LOCATION L0000884 VOLUME 453943.911 3772845.318 351.97
LOCATION L0000885 VOLUME 453940.396 3772844.616 351.94
LOCATION L0000886 VOLUME 453937.087 3772843.058 351.89
LOCATION L0000887 VOLUME 453933.778 3772841.499 351.84
LOCATION L0000888 VOLUME 453930.469 3772839.941 351.79
LOCATION L0000889 VOLUME 453927.160 3772838.383 351.73
LOCATION L0000890 VOLUME 453923.851 3772836.824 351.68
LOCATION L0000891 VOLUME 453920.542 3772835.266 351.63
LOCATION L0000892 VOLUME 453917.233 3772833.708 351.58
LOCATION L0000893 VOLUME 453913.924 3772832.149 351.53
LOCATION L0000894 VOLUME 453910.615 3772830.591 351.47
LOCATION L0000895 VOLUME 453907.306 3772829.033 351.42
LOCATION L0000896 VOLUME 453903.997 3772827.475 351.37
LOCATION L0000897 VOLUME 453900.688 3772825.916 351.32
LOCATION L0000898 VOLUME 453897.379 3772824.358 351.27
LOCATION L0000899 VOLUME 453894.070 3772822.800 351.22
LOCATION L0000900 VOLUME 453890.761 3772821.241 351.16
LOCATION L0000901 VOLUME 453887.452 3772819.683 351.11
LOCATION L0000902 VOLUME 453884.088 3772818.361 351.07
LOCATION L0000903 VOLUME 453880.431 3772818.304 351.07
LOCATION L0000904 VOLUME 453876.774 3772818.247 351.06
LOCATION L0000905 VOLUME 453873.116 3772818.190 351.06
LOCATION L0000906 VOLUME 453869.459 3772818.133 351.06
LOCATION L0000907 VOLUME 453865.802 3772818.076 351.06
LOCATION L0000908 VOLUME 453862.145 3772818.019 351.06
LOCATION L0000909 VOLUME 453858.488 3772817.962 351.05
LOCATION L0000910 VOLUME 453854.831 3772817.905 351.05
LOCATION L0000911 VOLUME 453851.174 3772817.848 351.05
LOCATION L0000912 VOLUME 453847.516 3772817.791 351.04
LOCATION L0000913 VOLUME 453843.859 3772817.734 351.04
LOCATION L0000914 VOLUME 453840.202 3772817.677 351.03
LOCATION L0000915 VOLUME 453836.545 3772817.620 351.02
LOCATION L0000916 VOLUME 453832.888 3772817.563 351.02
LOCATION L0000917 VOLUME 453829.231 3772817.506 351.01
LOCATION L0000918 VOLUME 453825.573 3772817.449 351.01
LOCATION L0000919 VOLUME 453821.916 3772817.392 351.00
LOCATION L0000920 VOLUME 453818.259 3772817.335 351.00
LOCATION L0000921 VOLUME 453814.602 3772817.279 351.00

```
   LOCATION L0000922     VOLUME   453810.945 3772817.222 351.00
   LOCATION L0000923     VOLUME   453807.288 3772817.165 351.00
   LOCATION L0000924     VOLUME   453803.630 3772817.108 351.00
   LOCATION L0000925     VOLUME   453799.973 3772817.051 351.00
   LOCATION L0000926     VOLUME   453796.316 3772816.994 351.00
   LOCATION L0000927     VOLUME   453792.659 3772816.937 350.83
   LOCATION L0000928     VOLUME   453789.002 3772816.880 350.83
   LOCATION L0000929     VOLUME   453785.345 3772816.823 350.83
   LOCATION L0000930     VOLUME   453781.688 3772816.766 350.83
   LOCATION L0000931     VOLUME   453778.030 3772816.709 350.83
   LOCATION L0000932     VOLUME   453774.373 3772816.652 350.83
   LOCATION L0000933     VOLUME   453770.716 3772816.595 350.83
   LOCATION L0000934     VOLUME   453767.059 3772816.538 350.83
   LOCATION L0000935     VOLUME   453763.402 3772816.481 350.83
   LOCATION L0000936     VOLUME   453759.745 3772816.424 350.83
   LOCATION L0000937     VOLUME   453756.087 3772816.367 350.79
   LOCATION L0000938     VOLUME   453752.430 3772816.310 350.75
   LOCATION L0000939     VOLUME   453748.773 3772816.253 350.71
   LOCATION L0000940     VOLUME   453745.116 3772816.196 350.68
   LOCATION L0000941     VOLUME   453741.459 3772816.140 350.64
   LOCATION L0000942     VOLUME   453737.802 3772816.083 350.60
   LOCATION L0000943     VOLUME   453734.145 3772816.026 350.56
   LOCATION L0000944     VOLUME   453730.487 3772815.969 350.53
   LOCATION L0000945     VOLUME   453726.830 3772815.912 350.52
   LOCATION L0000946     VOLUME   453723.173 3772815.855 350.51
   LOCATION L0000947     VOLUME   453719.516 3772815.798 350.51
   LOCATION L0000948     VOLUME   453715.859 3772815.741 350.51
   LOCATION L0000949     VOLUME   453712.202 3772815.684 350.51
   LOCATION L0000950     VOLUME   453708.544 3772815.627 350.51
** End of LINE VOLUME Source ID = ONSITE
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = CALAB
** DESCRSRC Calabash Ave Truck Travel
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 7.5E-07
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 2
** 453703.599, 3772815.829, 350.51, 0.00, 1.70
** 453707.056, 3773206.209, 355.97, 0.00, 1.70
** ----------------------------------------------------------------------
   LOCATION L0000951     VOLUME   453703.615 3772817.658 350.54
   LOCATION L0000952     VOLUME   453703.647 3772821.316 350.58
   LOCATION L0000953     VOLUME   453703.680 3772824.973 350.62
   LOCATION L0000954     VOLUME   453703.712 3772828.631 350.66
   LOCATION L0000955     VOLUME   453703.744 3772832.288 350.70
   LOCATION L0000956     VOLUME   453703.777 3772835.945 350.75
   LOCATION L0000957     VOLUME   453703.809 3772839.603 350.79
   LOCATION L0000958     VOLUME   453703.842 3772843.260 350.83
   LOCATION L0000959     VOLUME   453703.874 3772846.918 350.87
   LOCATION L0000960     VOLUME   453703.906 3772850.575 350.91
```

LOCATION L0000961 VOLUME 453703.939 3772854.233 350.95
LOCATION L0000962 VOLUME 453703.971 3772857.890 350.99
LOCATION L0000963 VOLUME 453704.004 3772861.548 351.02
LOCATION L0000964 VOLUME 453704.036 3772865.205 351.06
LOCATION L0000965 VOLUME 453704.068 3772868.863 351.10
LOCATION L0000966 VOLUME 453704.101 3772872.520 351.14
LOCATION L0000967 VOLUME 453704.133 3772876.177 351.17
LOCATION L0000968 VOLUME 453704.166 3772879.835 351.21
LOCATION L0000969 VOLUME 453704.198 3772883.492 351.25
LOCATION L0000970 VOLUME 453704.230 3772887.150 351.29
LOCATION L0000971 VOLUME 453704.263 3772890.807 351.32
LOCATION L0000972 VOLUME 453704.295 3772894.465 351.36
LOCATION L0000973 VOLUME 453704.327 3772898.122 351.40
LOCATION L0000974 VOLUME 453704.360 3772901.780 351.44
LOCATION L0000975 VOLUME 453704.392 3772905.437 351.47
LOCATION L0000976 VOLUME 453704.425 3772909.095 351.51
LOCATION L0000977 VOLUME 453704.457 3772912.752 351.55
LOCATION L0000978 VOLUME 453704.489 3772916.410 351.59
LOCATION L0000979 VOLUME 453704.522 3772920.067 351.62
LOCATION L0000980 VOLUME 453704.554 3772923.724 351.66
LOCATION L0000981 VOLUME 453704.587 3772927.382 351.70
LOCATION L0000982 VOLUME 453704.619 3772931.039 351.74
LOCATION L0000983 VOLUME 453704.651 3772934.697 351.77
LOCATION L0000984 VOLUME 453704.684 3772938.354 351.83
LOCATION L0000985 VOLUME 453704.716 3772942.012 351.90
LOCATION L0000986 VOLUME 453704.749 3772945.669 351.97
LOCATION L0000987 VOLUME 453704.781 3772949.327 352.03
LOCATION L0000988 VOLUME 453704.813 3772952.984 352.10
LOCATION L0000989 VOLUME 453704.846 3772956.642 352.17
LOCATION L0000990 VOLUME 453704.878 3772960.299 352.24
LOCATION L0000991 VOLUME 453704.910 3772963.956 352.30
LOCATION L0000992 VOLUME 453704.943 3772967.614 352.36
LOCATION L0000993 VOLUME 453704.975 3772971.271 352.41
LOCATION L0000994 VOLUME 453705.008 3772974.929 352.45
LOCATION L0000995 VOLUME 453705.040 3772978.586 352.50
LOCATION L0000996 VOLUME 453705.072 3772982.244 352.54
LOCATION L0000997 VOLUME 453705.105 3772985.901 352.58
LOCATION L0000998 VOLUME 453705.137 3772989.559 352.63
LOCATION L0000999 VOLUME 453705.170 3772993.216 352.67
LOCATION L0001000 VOLUME 453705.202 3772996.874 352.72
LOCATION L0001001 VOLUME 453705.234 3773000.531 352.79
LOCATION L0001002 VOLUME 453705.267 3773004.188 352.86
LOCATION L0001003 VOLUME 453705.299 3773007.846 352.92
LOCATION L0001004 VOLUME 453705.332 3773011.503 352.99
LOCATION L0001005 VOLUME 453705.364 3773015.161 353.06
LOCATION L0001006 VOLUME 453705.396 3773018.818 353.13
LOCATION L0001007 VOLUME 453705.429 3773022.476 353.19
LOCATION L0001008 VOLUME 453705.461 3773026.133 353.26
LOCATION L0001009 VOLUME 453705.494 3773029.791 353.30
LOCATION L0001010 VOLUME 453705.526 3773033.448 353.34
LOCATION L0001011 VOLUME 453705.558 3773037.106 353.37
LOCATION L0001012 VOLUME 453705.591 3773040.763 353.41
LOCATION L0001013 VOLUME 453705.623 3773044.420 353.45
LOCATION L0001014 VOLUME 453705.655 3773048.078 353.48

```
   LOCATION L0001015     VOLUME   453705.688 3773051.735 353.52
   LOCATION L0001016     VOLUME   453705.720 3773055.393 353.56
   LOCATION L0001017     VOLUME   453705.753 3773059.050 353.62
   LOCATION L0001018     VOLUME   453705.785 3773062.708 353.70
   LOCATION L0001019     VOLUME   453705.817 3773066.365 353.77
   LOCATION L0001020     VOLUME   453705.850 3773070.023 353.85
   LOCATION L0001021     VOLUME   453705.882 3773073.680 353.92
   LOCATION L0001022     VOLUME   453705.915 3773077.338 353.99
   LOCATION L0001023     VOLUME   453705.947 3773080.995 354.07
   LOCATION L0001024     VOLUME   453705.979 3773084.653 354.14
   LOCATION L0001025     VOLUME   453706.012 3773088.310 354.20
   LOCATION L0001026     VOLUME   453706.044 3773091.967 354.23
   LOCATION L0001027     VOLUME   453706.077 3773095.625 354.27
   LOCATION L0001028     VOLUME   453706.109 3773099.282 354.31
   LOCATION L0001029     VOLUME   453706.141 3773102.940 354.35
   LOCATION L0001030     VOLUME   453706.174 3773106.597 354.38
   LOCATION L0001031     VOLUME   453706.206 3773110.255 354.42
   LOCATION L0001032     VOLUME   453706.238 3773113.912 354.46
   LOCATION L0001033     VOLUME   453706.271 3773117.570 354.50
   LOCATION L0001034     VOLUME   453706.303 3773121.227 354.54
   LOCATION L0001035     VOLUME   453706.336 3773124.885 354.59
   LOCATION L0001036     VOLUME   453706.368 3773128.542 354.63
   LOCATION L0001037     VOLUME   453706.400 3773132.199 354.68
   LOCATION L0001038     VOLUME   453706.433 3773135.857 354.73
   LOCATION L0001039     VOLUME   453706.465 3773139.514 354.77
   LOCATION L0001040     VOLUME   453706.498 3773143.172 354.82
   LOCATION L0001041     VOLUME   453706.530 3773146.829 354.87
   LOCATION L0001042     VOLUME   453706.562 3773150.487 354.93
   LOCATION L0001043     VOLUME   453706.595 3773154.144 355.00
   LOCATION L0001044     VOLUME   453706.627 3773157.802 355.06
   LOCATION L0001045     VOLUME   453706.660 3773161.459 355.13
   LOCATION L0001046     VOLUME   453706.692 3773165.117 355.20
   LOCATION L0001047     VOLUME   453706.724 3773168.774 355.26
   LOCATION L0001048     VOLUME   453706.757 3773172.431 355.33
   LOCATION L0001049     VOLUME   453706.789 3773176.089 355.39
   LOCATION L0001050     VOLUME   453706.822 3773179.746 355.47
   LOCATION L0001051     VOLUME   453706.854 3773183.404 355.54
   LOCATION L0001052     VOLUME   453706.886 3773187.061 355.61
   LOCATION L0001053     VOLUME   453706.919 3773190.719 355.69
   LOCATION L0001054     VOLUME   453706.951 3773194.376 355.76
   LOCATION L0001055     VOLUME   453706.983 3773198.034 355.84
   LOCATION L0001056     VOLUME   453707.016 3773201.691 355.91
   LOCATION L0001057     VOLUME   453707.048 3773205.349 355.99
** End of LINE VOLUME Source ID = CALAB
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = WHITT
** DESCRSRC Whittram Ave Truck Travel
** PREFIX
** Length of Side = 12.19
** Configuration = Adjacent
** Emission Rate = 1.3E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
```

```
** Nodes = 10
** 453993.318, 3772814.475, 351.94, 0.00, 5.67
** 454020.960, 3772827.703, 351.93, 0.00, 5.67
** 454038.928, 3772836.245, 352.00, 0.00, 5.67
** 454065.585, 3772847.290, 352.00, 0.00, 5.67
** 454091.505, 3772855.832, 352.00, 0.00, 5.67
** 454113.640, 3772862.734, 352.60, 0.00, 5.67
** 454158.171, 3772870.705, 352.87, 0.00, 5.67
** 454192.132, 3772874.517, 353.00, 0.00, 5.67
** 454225.162, 3772875.759, 353.43, 0.00, 5.67
** 454393.010, 3772876.322, 355.00, 0.00, 5.67
** ----------------------------------------------------------------------
   LOCATION L0001058     VOLUME   453998.817 3772817.106 352.00
   LOCATION L0001059     VOLUME   454009.815 3772822.369 352.00
   LOCATION L0001060     VOLUME   454020.812 3772827.632 352.00
   LOCATION L0001061     VOLUME   454031.823 3772832.867 352.00
   LOCATION L0001062     VOLUME   454042.924 3772837.900 352.00
   LOCATION L0001063     VOLUME   454054.187 3772842.568 352.00
   LOCATION L0001064     VOLUME   454065.450 3772847.235 352.03
   LOCATION L0001065     VOLUME   454077.026 3772851.061 352.16
   LOCATION L0001066     VOLUME   454088.605 3772854.877 352.28
   LOCATION L0001067     VOLUME   454100.230 3772858.553 352.41
   LOCATION L0001068     VOLUME   454111.869 3772862.182 352.53
   LOCATION L0001069     VOLUME   454123.815 3772864.556 352.61
   LOCATION L0001070     VOLUME   454135.817 3772866.704 352.68
   LOCATION L0001071     VOLUME   454147.818 3772868.852 352.75
   LOCATION L0001072     VOLUME   454159.835 3772870.892 352.88
   LOCATION L0001073     VOLUME   454171.951 3772872.251 352.97
   LOCATION L0001074     VOLUME   454184.067 3772873.611 353.00
   LOCATION L0001075     VOLUME   454196.205 3772874.670 353.00
   LOCATION L0001076     VOLUME   454208.388 3772875.128 353.00
   LOCATION L0001077     VOLUME   454220.572 3772875.586 353.36
   LOCATION L0001078     VOLUME   454232.761 3772875.784 353.76
   LOCATION L0001079     VOLUME   454244.953 3772875.825 353.99
   LOCATION L0001080     VOLUME   454257.144 3772875.866 354.00
   LOCATION L0001081     VOLUME   454269.336 3772875.907 354.01
   LOCATION L0001082     VOLUME   454281.528 3772875.948 354.01
   LOCATION L0001083     VOLUME   454293.720 3772875.989 354.01
   LOCATION L0001084     VOLUME   454305.912 3772876.030 354.22
   LOCATION L0001085     VOLUME   454318.104 3772876.071 354.62
   LOCATION L0001086     VOLUME   454330.296 3772876.112 355.00
   LOCATION L0001087     VOLUME   454342.488 3772876.153 355.00
   LOCATION L0001088     VOLUME   454354.680 3772876.194 355.00
   LOCATION L0001089     VOLUME   454366.872 3772876.235 355.00
   LOCATION L0001090     VOLUME   454379.064 3772876.276 355.00
   LOCATION L0001091     VOLUME   454391.256 3772876.317 355.00
** End of LINE VOLUME Source ID = WHITT
   LOCATION IDLE         POINT      453883.040  3772831.670      351.510
** DESCRSRC Onsite Truck Idling
** Source Parameters **
** LINE VOLUME Source ID = ONSITE
   SRCPARAM L0000867     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000868     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000869     0.0000000256      0.00      1.70      0.85
```

```
SRCPARAM L0000870     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000871     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000872     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000873     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000874     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000875     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000876     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000877     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000878     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000879     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000880     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000881     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000882     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000883     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000884     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000885     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000886     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000887     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000888     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000889     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000890     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000891     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000892     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000893     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000894     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000895     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000896     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000897     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000898     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000899     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000900     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000901     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000902     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000903     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000904     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000905     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000906     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000907     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000908     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000909     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000910     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000911     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000912     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000913     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000914     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000915     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000916     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000917     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000918     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000919     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000920     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000921     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000922     0.0000000256      0.00      1.70      0.85
SRCPARAM L0000923     0.0000000256      0.00      1.70      0.85
```

```
   SRCPARAM L0000924     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000925     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000926     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000927     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000928     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000929     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000930     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000931     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000932     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000933     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000934     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000935     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000936     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000937     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000938     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000939     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000940     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000941     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000942     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000943     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000944     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000945     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000946     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000947     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000948     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000949     0.0000000256      0.00      1.70      0.85
   SRCPARAM L0000950     0.0000000256      0.00      1.70      0.85
** ----------------------------------------------------------------
** LINE VOLUME Source ID = CALAB
   SRCPARAM L0000951     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000952     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000953     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000954     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000955     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000956     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000957     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000958     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000959     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000960     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000961     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000962     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000963     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000964     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000965     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000966     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000967     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000968     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000969     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000970     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000971     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000972     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000973     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000974     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0000975     0.000000007009      0.00      1.70      0.85
```

```
SRCPARAM L0000976     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000977     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000978     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000979     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000980     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000981     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000982     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000983     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000984     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000985     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000986     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000987     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000988     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000989     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000990     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000991     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000992     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000993     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000994     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000995     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000996     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000997     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000998     0.000000007009      0.00      1.70      0.85
SRCPARAM L0000999     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001000     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001001     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001002     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001003     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001004     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001005     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001006     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001007     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001008     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001009     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001010     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001011     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001012     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001013     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001014     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001015     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001016     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001017     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001018     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001019     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001020     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001021     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001022     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001023     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001024     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001025     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001026     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001027     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001028     0.000000007009      0.00      1.70      0.85
SRCPARAM L0001029     0.000000007009      0.00      1.70      0.85
```

```
   SRCPARAM L0001030     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001031     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001032     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001033     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001034     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001035     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001036     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001037     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001038     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001039     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001040     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001041     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001042     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001043     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001044     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001045     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001046     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001047     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001048     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001049     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001050     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001051     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001052     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001053     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001054     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001055     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001056     0.000000007009      0.00      1.70      0.85
   SRCPARAM L0001057     0.000000007009      0.00      1.70      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = WHITT
   SRCPARAM L0001058     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001059     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001060     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001061     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001062     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001063     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001064     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001065     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001066     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001067     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001068     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001069     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001070     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001071     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001072     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001073     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001074     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001075     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001076     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001077     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001078     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001079     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001080     0.00000003824       0.00      5.67      0.85
   SRCPARAM L0001081     0.00000003824       0.00      5.67      0.85
```

```
   SRCPARAM L0001082     0.00000003824      0.00      5.67      0.85
   SRCPARAM L0001083     0.00000003824      0.00      5.67      0.85
   SRCPARAM L0001084     0.00000003824      0.00      5.67      0.85
   SRCPARAM L0001085     0.00000003824      0.00      5.67      0.85
   SRCPARAM L0001086     0.00000003824      0.00      5.67      0.85
   SRCPARAM L0001087     0.00000003824      0.00      5.67      0.85
   SRCPARAM L0001088     0.00000003824      0.00      5.67      0.85
   SRCPARAM L0001089     0.00000003824      0.00      5.67      0.85
   SRCPARAM L0001090     0.00000003824      0.00      5.67      0.85
   SRCPARAM L0001091     0.00000003824      0.00      5.67      0.85
** ------------------------------------------------------------------
   SRCPARAM IDLE          1.24E-06     3.840   366.000        50       0.1
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED DPM43-54.rou
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\FontanaADJU\FONT_V9_ADJU\FONT_v9.SFC
   PROFFILE ..\FontanaADJU\FONT_V9_ADJU\FONT_v9.PFL
   SURFDATA 3102 2011 Fontana_Station
   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 DPM43-54.AD\24H1GALL.PLT 31
   PLOTFILE PERIOD ALL DPM43-54.AD\PE00GALL.PLT 32
   SUMMFILE DPM43-54.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
**
```

* MODELING OPTIONS USED: RegDFAULT CONC ELEV URBAN ADJ_U*
* PLOT FILE OF PERIOD VALUES AVERAGED ACROSS 0 YEARS FOR SOURCE GROUP: ALL
* FOR A TOTAL OF 13 RECEPTORS.
* FORMAT: (3(1X,F13.5),3(1X,F8.2),2X,A6,2X,A8,2X,I8.8,2X,A8)

* X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM HRS	NET ID
453686.00000	3773179.00000	0.00014	355.31	355.31	0.00	PERIOD	ALL	00043848	
453688.00000	3773152.00000	0.00018	354.88	354.88	0.00	PERIOD	ALL	00043848	
453686.00000	3773120.00000	0.00017	354.40	354.40	0.00	PERIOD	ALL	00043848	
453679.00000	3773083.00000	0.00014	353.92	353.92	0.00	PERIOD	ALL	00043848	
453679.00000	3772996.00000	0.00016	352.65	352.65	0.00	PERIOD	ALL	00043848	
453680.00000	3772917.00000	0.00019	351.41	351.41	0.00	PERIOD	ALL	00043848	
453719.00000	3772952.00000	0.00030	352.15	352.15	0.00	PERIOD	ALL	00043848	
453724.00000	3772915.00000	0.00026	351.77	351.77	0.00	PERIOD	ALL	00043848	
453723.00000	3772873.00000	0.00032	351.33	351.33	0.00	PERIOD	ALL	00043848	
453751.00000	3772848.00000	0.00040	351.15	351.15	0.00	PERIOD	ALL	00043848	
453750.00000	3772828.00000	0.00102	350.88	350.88	0.00	PERIOD	ALL	00043848	
453820.00000	3772909.00000	0.00018	352.09	352.09	0.00	PERIOD	ALL	00043848	
454356.00000	3772894.00000	0.00031	355.00	355.00	0.00	PERIOD	ALL	00043848	

** CONCUNIT ug/m^3
** DEPUNIT g/m^2