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

945 – 995 W. MARKHAM STREET INDUSTRIAL BUILDING PROJECT

CITY OF PERRIS

Lead Agency:

City of Perris
101 North D Street
Perris, CA 92570-2200

Prepared by:

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

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
Air Basin	South Coast Air Basin
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
City	City of Perris
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
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 945 – 995 W. Markham Street Industrial Building 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 construction and operational 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 within the northwest portion of the City of Perris (City) at 945 and 995 Markham Street. The project site is located southwest of the intersection of Markham Street and Webster Avenue and consists of two parcels that total approximately 4.06 acres. The eastern parcel currently contains a single-family home with pool and several sheds and a workshop, located on the southwestern portion of the parcel. The western parcel currently contains a mobile home with a shed as well as containers and cars scattered over the parcel. The project site is bounded by Markham Street and an Xpo Logistics warehouse to the north, a single-family home to the east, an automobile auto auction lot to the south, and an Amazon fulfillment center to the west. The project local study area is shown in Figure 1.

Perris Valley Commerce Center Specific Plan

The project site is located in the northern portion of the Perris Valley Commerce Center Specific Plan (PVCCSP). The PVCCSP covers the area south of March Air Reserve Base / Inland Port Airport to the west and south of Harley Knox Boulevard to the east, Redlands Ave to the east, Placentia Avenue to the south and Interstate 215 to the west. The PVCCSP was approved in January 2012and the most recent amendment of the PVCCSP is Amendment No. 12 that was adopted in February 2022. Environmental

impacts resulting from implementation of allowed development under the PVCCSP have been evaluated in the *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report* (PVCCSP EIR) (State Clearinghouse No. 2009081086), which was certified by the City of Perris in January 2012.

Sensitive Receptors in Project Vicinity

The nearest sensitive receptor to the project site is a single-family home located as near as 30 feet to the east of the project site. There are also single-family homes located as near as 780 feet to the north of the project site. The nearest school is Val Verde High School, which is located as near as 0.8 mile south of the project site.

1.3 Proposed Project Description

The proposed project consists of the development and operation of a single-story, non-refrigerated light industrial warehouse building that would total 89,000 square feet, including 3,000 square feet of ground floor office space and 3,000 square feet of mezzanine office space. The building would be designed fronting Markham Street with 10 loading dock doors on the western portion of the south side in order to screen loading activities from the public right-of-way and to locate loading area as far away as possible from the home on the east side of the project site. The proposed project would have a total of 55 passenger car spaces, including 5 ADA spaces. Pursuant to Section 5.106.5.2 of the 2019 California Green Building Standards Code (CC, Title 24, Part 11 or CalGreen), five of the parking spaces would provide equipment for the charging of electric vehicles. Additionally, a bike rack would be located near the main entrance of the warehouse located at the northeast corner of the building. 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 1110.2 Emissions from Engines – Control the emissions from the fire pump;
- Rule 1113 Architectural Coatings – Controls the VOC content in paints and solvents;
- Rule 1143 Paint Thinners – Controls the VOC content in paint thinners; and
- 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 Project Design Features Incorporated into the Proposed Project

This analysis was based on implementation of the following project design feature that the project applicant has committed to implementing. According to *Forklift Market Analysis, 2016-2027,* prepared by Grand View Research, 2019, currently two-thirds of all new forklifts sold will be electric-powered and by

2027 three-quarter of all new forklifts will be electric-powered. As such Project Design Feature 1 is based on current market trends, as it would not be cost-effective to install the diesel tanks onsite for the limited duration of use of diesel-powered equipment onsite.

Project Design Feature 1:
All off-road equipment (non-street legal), such as forklifts and street sweepers, used onsite for warehouse operations shall be powered by alternative fuels, electrical batteries or other alternative/non-diesel fuels (e.g., propane or compressed natural gas (CNG)) that do not emit diesel particulate matter, and that are low or zero emission.

1.6 Applicable Mitigation Measures for the Proposed Project

Development within the PVCCSP planning area is subject to the mitigation measures identified in the PVCCSP EIR, whether or not the project-specific impacts of the individual project are significant. The PVCCSP EIR mitigation measures that are applicable to the proposed project and this analysis are as follows:

Applicable Mitigation Measures from the PVCCSP EIR

Air Quality

MM Air 1
To identify potential implementing development project-specific impacts resulting from construction activities, proposed development projects that are subject to CEQA shall have construction-related air quality impacts analyzed using the latest available URBEMIS model, or other analytical method determined in conjunction with the SCAQMD. The results of the construction-related air quality impacts analysis shall be included in the development project's CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate SCAQMD's Localized Significance Threshold analysis or other appropriate analyses as determined in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts.

MM Air 2
Each individual implementing development project shall submit a traffic control plan prior to the issuance of a grading permit. The traffic control plan shall describe in detail safe detours and provide temporary traffic control during construction activities for the project. To reduce traffic congestion, the plan shall include, as necessary, appropriate, and practicable, the following: temporary traffic controls such as a flag person during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and off-site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hour, consolidating truck deliveries, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow.

MM Air 3
MM Air 3. To reduce fugitive dust emissions, the development of each individual implementing development project shall comply with SCAQMD Rule 403. The developer of each implementing project shall provide the City of Perris with the SCAQMD-approved dust control plan, or other

sufficient proof of compliance with Rule 403, prior to grading permit issuance. Dust control measures shall include, but are not limited to:

- Requiring the application of non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 20 days or more, assuming no rain),
- Keeping disturbed/loose soil moist at all times,
- Requiring trucks entering or leaving the site hauling dirt, sand, or soil, or other loose materials on public roads to be covered,
- Installation of wheel washers or gravel construction entrances where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and equipment leaving the site each trip,
- Posting and enforcement of traffic speed limits of 15 miles per hour or less on all unpaved portions of the project site,
- Suspending all excavating and grading operations when wind gusts (as instantaneous gusts) exceed 25 miles per hour,
- Appointment of a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM-10 generation,
- Sweeping streets at the end of the day if visible soil material is carried onto adjacent paved public roads and use of SCAQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks when sweeping streets to remove visible soil materials,
- Replacement of ground cover in disturbed areas as quickly as possible.

MM Air 4

Building and grading permits shall include a restriction that limits idling of construction equipment on site to no more than five minutes.

MM Air 5

Electricity from power poles shall be used instead of temporary diesel or gasoline-powered generators to reduce the associated emissions. Approval will be required by the City of Perris' Building Division prior to issuance of grading permits.

MM Air 6

The developer of each implementing development project shall require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the CARB in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) and/or meets or exceeds Tier 3 standards with available CARB verified or US EPA certified technologies. Diesel equipment shall use water emulsified diesel fuel such as PuriNOx unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Perris' Building Division prior to issuance of a grading permit.

MM Air 7
During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Perris' Building Division. Equipment maintenance records and equipment design specification data sheets shall be kept on-site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Perris' Building Division.

MM Air 8
Each individual implementing development project shall apply paints using either high volume low pressure (HVLP) spray equipment with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.

MM Air 9
To reduce VOC emissions associated with architectural coating, the project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g. bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize "Super-Compliant" VOC paints, which are defined in SCAQMD's Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The specifications for each implementing development project shall be reviewed by the City of Perris' Building Division for compliance with the mitigation measure prior to issuance of a building permit for that project.

MM Air 10
To identify potential implementing development project-specific impacts resulting from operational activities, proposed development projects that are subject to CEQA shall have long-term operational-related air quality impacts analyzed using the latest URBEMIS model, or other analytical method determined by the City of Perris as lead agency in conjunction with the SCAQMD. The results of the operational-related air quality impacts analysis shall be included in the development project's CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate SCAQMD's Localized Significance Threshold analysis, CO Hot Spot analysis, or other appropriate analyses as determined by the City of Perris in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts.

MM Air 11
Signage shall be posted at all loading docks and all entrances to loading areas prohibiting all on-site truck idling in excess of five minutes.

MM Air 12
Where transport refrigeration units (TRUs) are in use, electrical hookups will be installed at all loading and unloading stalls in order to allow TRUs with electric standby capabilities to use them.

MM Air 13
In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest of each implementing development project shall provide building occupants and businesses with information related to SCAQMD's Carl Moyer Program, or other

state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effects of diesel particulates, benefits of reducing idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year will be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP, HVIP, and SOON funding programs, as identified on SCAQMD's website (http://www.aqmd.gov). Tenants will be required to use those funds, if awarded.

MM Air 14

Each implementing development project shall designate parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance will be required prior to the issuance of occupancy permits.

MM Air 15

To identify potential implementing development project-specific impacts resulting from the use of diesel trucks, proposed implementing development projects that include an excess of 10 dock doors for a single building, a minimum of 100 truck trips per day, 40 truck trips with TRUs per day, or TRU operations exceeding 300 hours per week, and that are subject to CEQA and are located adjacent to sensitive land uses; shall have a facility-specific Health Risk Assessment performed to assess the diesel particulate matter impacts from mobile-source traffic generated by that implementing development project. The results of the Health Risk Assessment shall be included in the CEQA documentation for each implementing development project.

MM Air 18

Prior to the approval of each implementing development project, the Riverside Transit Authority (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the project site shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area set aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of ADA-compliant paths to the major building entrances of the project.

MM Air 19

In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g. electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the project site. These plans shall be reviewed and approved by the applicable City Department (e.g. City of Perris' Building Division) prior to conveyance of applicable streets.

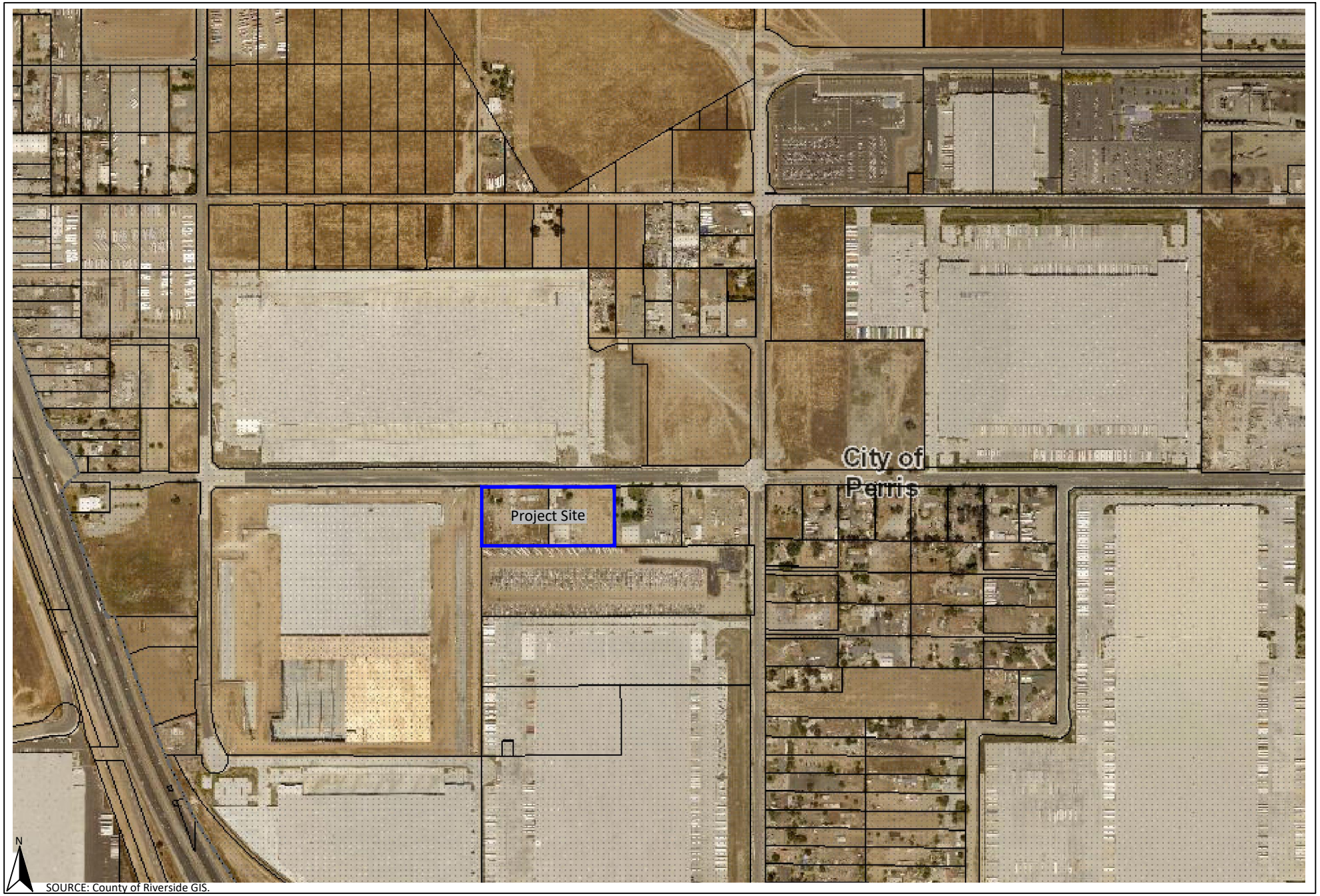
MM Air 20

Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24 and reduce indoor water use by 25 percent. All reductions will be documented through a checklist to be submitted prior to

issuance of building permits for the implementing development project with building plans and calculations.

MM Air 21

Each implementing development project shall implement, at a minimum, use of water conserving appliances and fixtures (low-flush toilets, and low-flow shower heads and faucets) within all new residential developments.



SOURCE: County of Riverside GIS.

VISTA ENVIRONMENTAL

Figure 1
Project Local Study Area

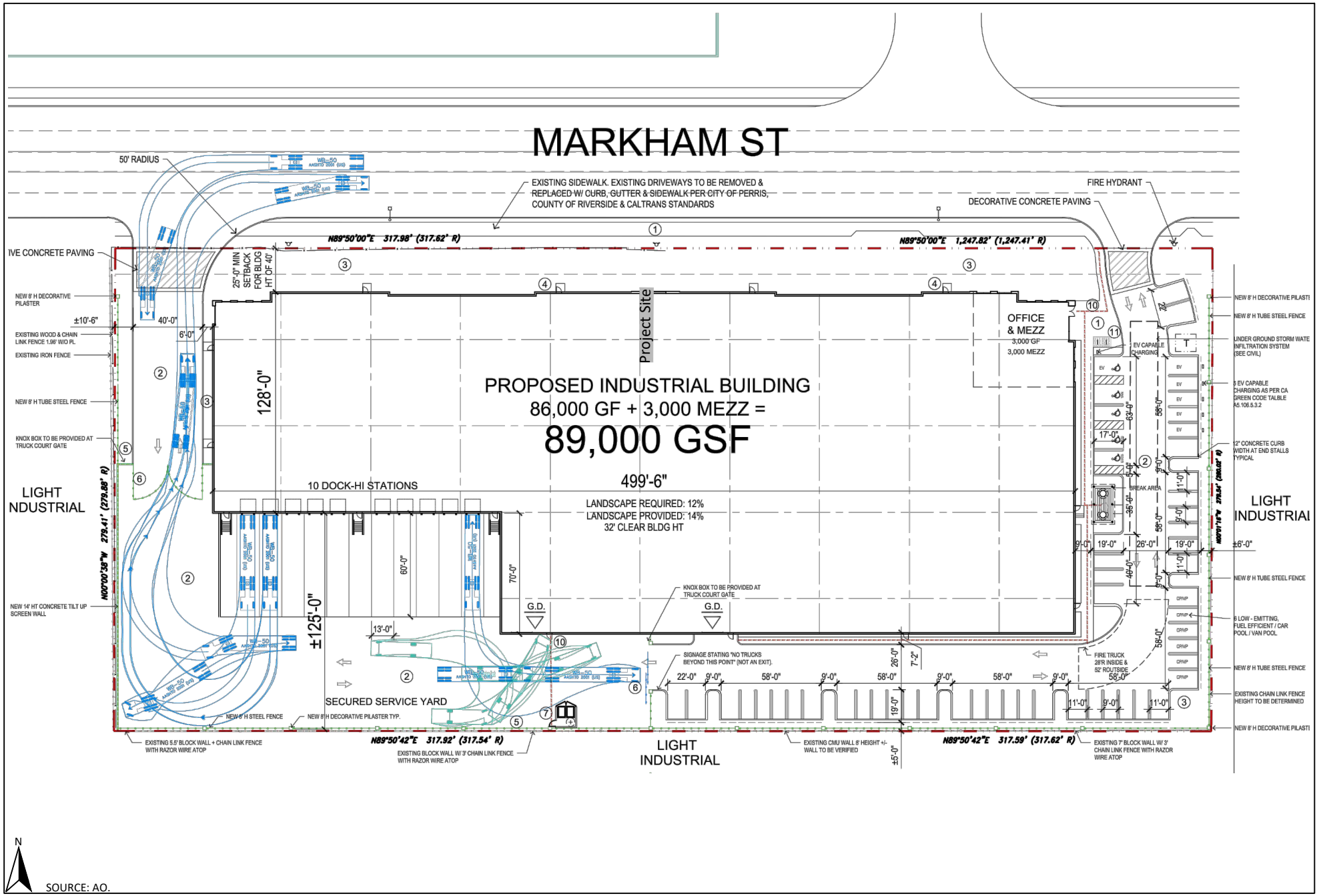


Figure 2
Site Plan

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

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

According to *The California Almanac of Emissions and Air Quality 2013 Edition*, the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important of which is diesel particulate matter (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.

The various pollutants within DPM that also cause acute and chronic health impacts are detailed below in Table A. Table A was developed through crosschecking all diesel emissions pollutants provided in the San Diego Air Pollutant Control District's (SDAPCD) Diesel Fired Engines Emissions Factor Table to the list of acute and chronic reference exposure levels provided at: http://oehha.ca.gov/air/allrels.html.

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

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

TAC	TAC Potency Factors (µg/m³)[1]		Percent of DPM Emission Rate[3]	Target Organ Systems
	Acute REL[2]	Chronic REL		
1,3-Butadiene	660	140	0.51%	Development
Acetaldehyde	470	140	1.84%	Eyes, respiratory system (sensory irritation)
Acrolein	2.5	0.35	0.08%	Eyes, respiratory system
Arsenic	0.2	0.015	0.004%	Reproductive/developmental, cardiovascular system, nervous system
Benzene	27	3	0.44%	Hematologic system, immune system, reproductive/developmental
Cadmium	--	0.02	0.004%	kidney, respiratory system
Chlorobenzene	--	1,000	0.0005%	Eyes, respiratory system
Chromium (hexavalent)	--	0.2	0.001%	Respiratory system, hematologic system
Copper	100	--	0.01%	Respiratory system
Ethyl benzene	--	5	0.03%	Liver, kidney, developmental
Formaldehyde	55	9	4.07%	Eyes, immune system, respiratory
Hexane	--	200	0.06%	Nervous system
Hydrogen Chloride	2,100	9	0.44%	Eyes, respiratory system
Manganese	--	0.09	0.01%	Nervous system
Mercury	0.6	0.03	0.005%	Reproductive/developmental
Naphthalene	--	9	0.05%	Respiratory system
Nickel	0.2	002	0.01%	Immune system, respiratory system
Propylene	--	3000	1.10%	Respiratory System
Selenium	--	20	0.01%	Liver, cardiovascular system, nervous system
Toluene	37000	300	0.25%	Nervous system, eyes, respiratory system, reproductive/developmental
Xylene	22000	700	0.10%	Eyes, nervous and respiratory systems
DPM	--	5	--	Respiratory system

Notes:
[1] Potency factors obtained from: http://www.oehha.ca.gov/risk/ChemicalDB/index.asp
[2] REL = Reference Exposure Level

[3] Percentage of DPM Emission Rate calculated by dividing the pollutant's pounds per 1,000 gallons rate by the PM2.5 pounds per 1,000 gallons rate provided by the SDAPCD
Sources: SDAPCD, 2011 and OEHHA, 2014.

Asbestos

Asbestos is listed as a TAC by 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 45 miles east of the project site in the San Jacinto Mountains. Due to the distance to the nearest natural occurrences of asbestos, the project site is not likely to contain asbestos.

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 B. 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 B – 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 1990-2019,* prepared by the EPA, in 2019 total U.S. GHG emissions were 6,558 million metric tons (MMT) of CO_2e emissions. Total U.S. emissions have increased by 4 percent between 1990 and 2016 and GHG emissions decreased by 13 percent between 2005 and 2019. The recent decrease in GHG emissions was a result of multiple factors, including population, economic growth, energy markets, and technological changes the include energy efficiency and energy fuel choices. Between 2018 and 2019, GHG emissions decreased by almost 2 percent due to multiple factors, including a one percent decrease in total energy use.

According to *California Greenhouse Gas Emissions for 2000 to 2019 Trends of Emissions and Other Indicators*, prepared by the CARB, July 28, 2021, the State of California created 418.2 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) in 2019. The 2019 emissions were 7.2 $MMTCO_2e$ lower than 2018 levels and almost 13 $MMTCO_2e$ below the State adopted year 2020 GHG limit of 431 $MMTCO_2e$. The breakdown of California GHG emissions by sector consists of: 39.7 percent from transportation; 21.1 percent from industrial; 14.1 percent from electricity generation; 7.6 percent from agriculture; 10.5 percent from residential and commercial buildings; 4.9 percent from high global warming potential sources, and 2.1 percent from waste.

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

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 C.

Table C – 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: Draft 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 D, 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 D – 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, May 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 E. 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 E – 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	Nonattainment[c] (CA 60 Near-road portion of San Bernardino, Riverside and Los Angeles Counties) Attainment (remainder of Basin)
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, May 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) While this region is currently in Nonattainment, the CARB approved a redesignation to attainment to attainment based on 2018-2020 data on February 24, 2022.

As shown in Table E, 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 commercial retail 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

The 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. The 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 *2022 Air Quality Management Plan* (2022 AQMP), was adopted by the SCAQMD Board December 2, 2022 and has been submitted to the ARB for adoption before submittal to the U.S. EPA for final approval, which are anticipated to occur sometime this year. After the 2022 AQMP has been adopted by the CARB and 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.

As such the current applicable AQMP is the *Final 2016 Air Quality Management Plan* (2016 AQMP) that was adopted by the SCAQMD Board on March 3, 2016 and was adopted by the CARB on March 23, 2017 for inclusion into the SIP. The 2016 AQMP was prepared in order to meet the following standards:

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

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

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

Although the 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 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 warehouse 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 project site.
- Do not allow any track out of material to extend more than 25 feet onto a public roadway and remove all track out at the end of each workday.
- Water all exposed areas on active sites at least three times per day and pre-water all areas prior to clearing and soil moving activities.
- Apply nontoxic chemical stabilizers according to manufacturer specifications to all construction areas that will remain inactive for 10 days or longer.
- Pre-water all material to be exported prior to loading, and either cover all loads or maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code Section 23114.
- Replant all disturbed area as soon as practical.
- Suspend all grading activities when wind speeds (including wind gusts) exceed 25 miles per hour.
- Restrict traffic speeds on all unpaved roads to 15 miles per hour or less.

Rules 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 1110.2 – Emissions from Engines

Rule 1110.2 governs emissions from gaseous and liquid fueled engines that includes the proposed diesel-powered fire pump. This rule regulates NOx, VOC and CO emissions from engines. For emergency standby engines, that include the fire pump, Rule 1110.2 limits operation to 200 hours per year or less.

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 are to integrate land use planning with transportation planning that promotes higher density infill development in close proximity to existing transit service. These plans form the basis for the land use and transportation components of the AQMP, which are utilized in the preparation of air quality forecasts and in the consistency analysis included in the AQMP. The Connect SoCal, 2019 FTIP, and AQMP are based on projections originating within the City and County General Plans.

4.4 Local – City of Perris

Local jurisdictions, such as the City of Perris, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City 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 City 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 City does not, however, have the expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the City and region will meet federal and state standards. Instead, the City 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.

<u>City of Perris General Plan</u>

The City of Perris General Plan contains the following air quality-related objectives and policies that are applicable to the proposed project.

Goal HC-6: Healthy Environment

Support efforts of local businesses and regional agencies to improve the health of our region's environment.

Policies

HC 6.3 Promote measures that will be effective in reducing emissions during construction activities.

- Perris will ensure that construction activities follow existing South Coast Air Quality Management District (SCAQMD) rules and regulations.
- All construction equipment for public and private projects will also comply with California Air Resource Board's vehicle standards. For projects that may exceed daily construction emissions established by the SCAQMD, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the SCAQMD.
- Project proponents will be required to prepare and implement a Construction Management Plan which will include Best Available Control Measures among others. Appropriate control measures will be determined on a project by project basis, and should be specific to the pollutant for which the daily threshold is exceeded.

5.0 ENERGY CONSERVATION MANAGEMENT

The regulatory setting related to energy conservation is primarily addressed through State and City 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 – City of Perris

The applicable energy plan for the proposed project is the *City of Perris General Plan Conservation Element*, adopted February 18, 2008. The applicable energy-related goals and policies in the General Plan Conservation Element for the proposed project are shown below:

Goal VIII – Sustainable Future

Create a vision for energy and resource conservation and the use of green building design for the City, to protect the environment, improve quality of life, and promote sustainable practices.

Policies

VIII.A: Adopt and maintain development regulations that encourage water and resource conservation.

VIII.B: Adopt and maintain development regulations that encourage recycling and reduced waste generation by construction projects.

VIII.C: Adopt and maintain development regulations which encourage increased energy efficiency in buildings, and the design of durable buildings that are efficient and economical to own and operate. Encourage green building development by establishing density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who meet LEED building standards for new and refurbished developments (U.S. Green Building Council's Leadership in Energy and Environmental Design green building programs).

VIII.D Educate and promote the health and productivity benefits for residents, workers and visitors to the City that can be achieved through Green Building techniques and conservation of resources.

Goal IX

Encourage project designs that support the use of alternative transportation facilities.

Policies

IX.A: Encourage land uses and new development that support alternatives to the single occupant vehicle.

Goal X

Encourage improved energy performance standards above and beyond the California Title 24 requirements.

Policies

X.A: Establish density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who exceed current Title 24 requirements for new development.

X.B: Encourage the use of trees within project design to lessen energy needs, reduce the urban heat island effect, and improve air quality throughout the region.

X.C: Encourage strategic shape and placement of new structures within new commercial and industrial projects.

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 responsible for implementing state policy to address global climate change, however there are State regulations related to global climate change that affect a variety of State agencies. CARB, which is a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both the federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets 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,* prepared by the CARB, November 16, 2022 that will be considered for adoption at CARB's December Board meeting, 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 establish 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 pprojects."

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.

Executive Order S-3-05

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

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

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

Assembly Bill 1493

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

The 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. The 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 the CARB nor the OPR has developed GHG emissions threshold, the SCAQMD formed a Working Group in April 2008 to develop significance thresholds related to GHG emissions. In December 2008, the SCAQMD Governing Board adopted an interim 10,000 metric tons CO_2e ($MTCO_2e$) per year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. The Working Group continued to consider significance thresholds for development projects where the SCAQMD is not the lead agency. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds 10,000 $MTCO_2e$ for all industrial projects, which recommends a tiered approach that provides quantitative annual thresholds of 3,500 $MTCO_2e$ for residential uses, 1,400 $MTCO_2e$ for commercial uses, and 3,000 $MTCO_2e$ for mixed uses. Alternatively, a lead agency has the option to use 3,000 $MTCO_2e$ per year as a threshold for all non-industrial projects. Although both options are recommended by the SCAQMD, a lead agency is advised to use only one option and to use it consistently.

The thresholds identified above have not been adopted by the SCAQMD or distributed for widespread public review and comment, and the working group tasked with developing the thresholds has not met since September 2010. The future schedule and likelihood of threshold adoption is uncertain.

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 – City of Perris

City of Perris General Plan

The City of Perris General Plan provides the following GHG emissions-related goals and policies that are applicable to the proposed project.

Goal VIII: Sustainable Future

Support Create a vision for energy and resource conservation and the use of green building design for the City, to protect the environment, improve quality of life, and promote sustainable practices.

Policies

VIII.A Adopt and maintain development regulations that encourage water and resource conservation.

VIII.B Adopt and maintain development regulations that encourage recycling and reduced waster generation by construction projects.

VIII.C Adopt and maintain development regulations which encourage increased energy efficiency in buildings, and the design of durable buildings that are efficient and economical to own and operate. Encourage green building development by establishing density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who meet LEED building standards for new and refurbished developments (U.S. Green Building Council's Leadership in Energy and Environmental Design green building programs).

VIII.D Educate and promote the health and productivity benefits for residents, workers and visitors to the City that can be achieved through Green Building techniques and conservation of resources.

Goal IX:

Encourage project designs that support the use of alternative transportation facilities.

Policies

IX.A Encourage land uses and new development that support alternatives to the single occupant vehicle.

Goal X:

Encourage improved energy performance standards above and beyond the California Title 24 requirements.

Policies

X.A Establish density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who exceed current Title 24 requirements for new development.

X.B Encourage the use of trees within project design to lessen energy needs, reduce the urban heat island effect, and improve air quality throughout the region.

X.C Encourage strategic shape and placement of new structures within new commercial and industrial projects.

7.0 ATMOSPHERIC SETTING

7.1 South Coast Air Basin

The project site is located within the City of Perris and western Riverside County, which is part of the Air Basin that includes all of Orange County as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. 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 Riverside 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 Riverside 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 Riverside County late in the afternoon. This transport pattern creates unhealthful air quality that may extend to the project site particularly during the summer months.

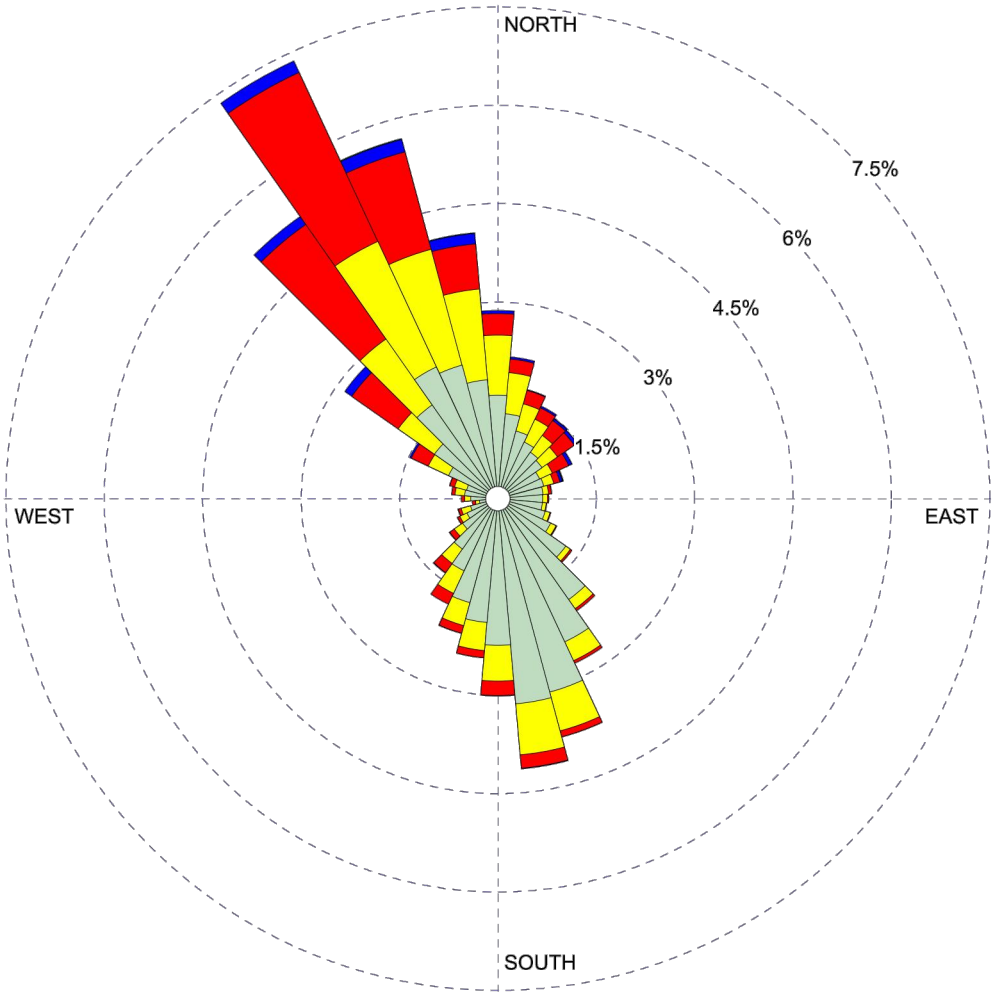
Winds are an important parameter in characterizing the air quality environment of a project site because they both determine the regional pattern of air pollution transport and control the rate of dispersion near a source. Daytime winds in western Riverside County are usually light breezes from off the 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 the Perris 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 #3171

DISPLAY:
Wind Speed
Direction (blowing from)



WIND SPEED
(Knots)

- >= 21.58
- 17.11 - 21.58
- 11.08 - 17.11
- 7.00 - 11.08
- 4.08 - 7.00
- 0.97 - 4.08

Calms: 25.40%

COMMENTS:	DATA PERIOD: **Start Date: 1/1/2010 - 00:00** **End Date: 12/31/2016 - 23:59**	COMPANY NAME:	
		MODELER:	
	CALM WINDS: **25.40%**	TOTAL COUNT: **43476 hrs.**	
	AVG. WIND SPEED: **3.03 Knots**	DATE: **11/5/2021**	PROJECT NO.:

WRPLOT View - Lakes Environmental Software

VISTA ENVIRONMENTAL

Figure 3
Perris Monitoring Station Wind Rose

The temperature and precipitation levels for Perris Station, which is the nearest weather station to the project site with historical data is shown below in Table F. Table F shows that August 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	65.3	34.7	1.63
February	68.1	37.5	1.93
March	68.3	38.9	1.29
April	74.2	41.6	1.04
May	79.6	47.5	0.16
June	85.3	51.7	0.06
July	96.7	57.4	0.33
August	96.9	58.7	0.06
September	90.8	53.2	0.35
October	82.5	47.1	0.14
November	72.0	40.5	1.97
December	64.5	34.9	1.45
Annual	**78.7**	**45.3**	**10.42**

Source: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6816

7.3 Monitored Local Air Quality

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

The SCAQMD has divided the Air Basin into 38 source receptor areas (SRAs) with a designated ambient air monitoring station representative of each area. The project site is located within SRA 24, Perris Valley. Since not all air monitoring stations measure all of the tracked pollutants, the data from the following two monitoring stations, listed in the order of proximity to the project site have been used; Perris Monitoring Station (Perris Station) and Lake Elsinore W Flint Street Monitoring Station (Lake Elsinore Station).

The Perris Station is located approximately 3.9 miles south of the project site at 237 ½ N. D Street, Perris and the Lake Elsinore Station is located approximately 13.5 miles southwest of the project site at 506 W Flint Street, Lake Elsinore. The monitoring data is presented in Table G and shows the most recent three years of monitoring data available from CARB. Ozone and PM10 were measured at the Perris Station and NO_2 and PM2.5 were measured at the Lake Elsinore Station. 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] 2019	2020	2021
Ozone: [1]			
Maximum 1-Hour Concentration (ppm)	0.118	0.125	0.117
Days > CAAQS (0.09 ppm)	**28**	**34**	**25**
Maximum 8-Hour Concentration (ppm)	0.095	0.106	0.094
Days > NAAQS (0.070 ppm)	**64**	**74**	**55**
Days > CAAQs (0.070 ppm)	**66**	**77**	**60**
Nitrogen Dioxide:[2]			
Maximum 1-Hour Concentration (ppb)	38	43.6	43.7
Days > NAAQS (100 ppb)	0	0	0
Days > CAAQS (180 ppb)	0	0	0
Inhalable Particulates (PM10):[1]			
Maximum 24-Hour National Measurement (ug/m^3)	97.0	92.3	77.5
Days > NAAQS (150 ug/m^3)	0	0	0
Days > CAAQS (50 ug/m^3)	**4**	**6**	**4**
Annual Arithmetic Mean (AAM) (ug/m^3)	25.8	33.4	30.4
Annual > NAAQS (50 ug/m^3)	No	No	No
Annual > CAAQS (20 ug/m^3)	**Yes**	**Yes**	**Yes**
Ultra-Fine Particulates (PM2.5):[2]			
Maximum 24-Hour California Measurement (ug/m^3)	17.6	41.6	28.8
Days > NAAQS (35 ug/m^3)	0	0	0
Annual Arithmetic Mean (AAM) (ug/m^3)	ND	7.2	6.9
Annual > NAAQS and CAAQS (12 ug/m^3)	No	No	No

Notes: Exceedances are listed in **bold.** CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million; ppb = parts per billion; ND = no data available.

[1] Data obtained from the Perris Station.

[2] Data obtained from the Lake Elsinore 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 25 and 34 days each year at the Perris Station. The State 8-hour ozone standard has been exceeded between 60 and 77 days each year over the last three years at the Perris Station. The Federal 8-hour ozone standard has been exceeded between 55 and 74 days each year over the last three years at the Perris 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 Lake Elsinore 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 4 and 6 days each year over the past three years at the Perris Station. Over the past three years the Federal 24-hour standard for PM10 has not been exceeded at the Perris Station. The annual PM10 concentration at the Perris 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 not been exceeded at the Lake Elsinore Station. The annual PM2.5 concentrations at the Lake Elsinore Station has not exceeded either the State and Federal standards for 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 365 per million persons chance of cancer. In comparison, the average cancer risk for the Air Basin is 455 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 2022.1.1.5 (see Appendix A). 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 Riverside 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 Riverside County, a Climate Zone of 10, utility companies of Southern California Edison and Southern California Gas (with 2024 forecast factors), and project opening year of 2024.

Land Use Parameters

The proposed project consists of development of an 89,000-square-foot warehouse. The proposed warehouse would have a truck loading area with 10 dock doors on the western portion of the south side of the building. A total of 55 passenger car spaces will be provided that will be located on the south and east sides of the warehouse. The proposed project's land use parameters that were entered into the CalEEMod model are shown in Table H.

Table H – CalEEMod Land Use Parameters

Proposed Land Use	Land Use Subtype in CalEEMod	Land Use Size[1]	Lot Acreage[2]	Building/Paving[3] (square feet)
Unrefrigerated Warehouse	Unrefrigerated Warehouse No Rail	89.00 TSF	2.38	89,000
Paved Area (Truck Loading Area, Driveways, and Parking Lots)	Parking Lot	1.68 AC	1.68	73,181

Notes:
[1] TSF = Thousand Square Feet; AC = Acre
[2] Lot acreage calculated based on the total project site of 4.06-acres.
[3] Building/Paving square feet represent area where architectural coatings will be applied. Paved area based on CalEEMod default values.

Construction Parameters

Construction of the proposed project is anticipated to start around November 2023 and would be completed in 10 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. In order to account for PVCCSP EIR mitigation measure MM Air-6 that requires all construction utilized in the PVCCSP, to meet or exceed US EPA Tier 3 standards, the mitigation of Tier 3 equipment was selected in CalEEMod.

Demolition

The demolition phase would consist of demolishing the existing structures on the project site that total approximate 12,100 square feet of building space. In addition, the existing driveways and pool on the project site would also need to be demolished, which has been estimated to cover 17,000 square feet of pavement to be demolished. The pavement was assumed to be an average of 4-inches thick and weigh 145 pounds per square foot, which results in 411 tons of pavement that would be removed from the project site. For the existing structures to be demolished, CalEEMod utilizes a factor of 0.046 tons of debris of building material per building square foot. This results in 557 tons of debris that would be generated from demolition of the existing structures. Therefore, the combined demolition of the structures and pavement area would require the removal of 967 tons of debris that would be exported from the site and would generate an average of 12.1 haul truck trips per day over duration of demolition phase.

The demolition phase has been modeled as starting in November 2023 and would occur over four weeks, which is based on the CalEEMod default timing. The demolition activities would require 15 worker trips per day. In order to account for water truck emissions, six vendor truck emissions were 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. In order to account for SCAQMD Rule 403 minimum requirements water demolished area two times per day was selected.

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 one week, which is based on the CalEEMod default timing. The site preparation activities would require 18 worker trips per day. In order to account for water truck emissions, six vendor truck emissions were added to the site preparation phase. The onsite equipment would consist of three rubber-tired dozers, and four of either tractors, loaders, or backhoes, which is based on the CalEEMod default equipment mix.

Grading

The grading phase would occur after completion of the site preparation phase and was modeled as occurring over two weeks, which was extended from the CalEEMod default timing of eight workdays, in order to account for the import of 2,000 cubic yards of dirt. The import of dirt would generate an average of 31.3 haul truck trips per day over duration of grading phase. The grading activities would require 15 worker trips per day. In order to account for water truck emissions, six vendor truck emissions were added to the grading phase. The onsite equipment would consist of one excavator, one grader, one rubber-tired dozer, and three of either tractors, loaders, or backhoes, which is based on the CalEEMod default equipment mix.

Building Construction

The building construction would occur after the completion of the grading phase and was modeled as occurring over nine months, which was shortened in order to fit the construction schedule provided by the project applicant. The building construction phase would generate 37 worker trips and 15 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 loading area, driveways, and parking lots. The paving phase was modeled as occurring concurrently with the final 18 workdays of the building construction phase. The paving phase would generate 20 worker trips per day. The onsite equipment would consist of the simultaneous operation of two cement and mortar mixers, one paver, two paving equipment, two rollers, and of one of either a tractor, loader, or backhoe, which is based on the CalEEMod default equipment mix.

Architectural Coating

The application of architectural coatings was modeled as occurring concurrently with the final 18 workdays of the building construction phase and concurrent with the paving phase. The architectural coating phase was modeled based on covering 133,500 square feet of non-residential interior area, 44,500 square feet of non-residential exterior area, and 4,391 square feet of parking area. The architectural coating phase would generate 7 worker trips per day. The onsite equipment would consist of one air compressor, which is based on the CalEEMod default equipment mix.

Operational Emissions Modeling

The operations-related criteria air pollutant emissions and GHG emissions created by the proposed project have been analyzed through use of the CalEEMod model. The proposed project was analyzed in the CalEEMod model based on the land use parameters provided above and the parameters entered for each operational emission source is 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 *945 – 995 W. Markham Street Industrial Building Vehicle Miles Traveled (VMT) & Trip Generation Screening Analysis* (Traffic Analysis), prepared by EPD Solutions, Inc., September 9, 2022. The Traffic Analysis found that the proposed project would generate a total of 152 daily trips, of which would consist of the following breakdown: 99 passenger cars, 13 2-axle trucks, 22 3-axle trucks, and 100 4+ axle trucks.

According to *Review of SCAQMD Staff Comments and Testimony on Warehouse Projects*, prepared by Southern California Leadership Council, March 14, 2014, the SCAQMD details that truck trip length should be set to 40 miles in CalEEMod. In order to account for the longer truck trip length in CalEEMod, the 53 daily truck trips were analyzed under the "Parking Lot" land use, where the trip length was set to 40 miles. For the 99 passenger car daily trips, the trips were analyzed under the "Unrefrigerated Warehouse" land use in CalEEMod. The passenger car trip lengths were based on the default trip lengths. The vehicle trips rate utilized in the CalEEMod model are provided in Table I.

Table I – Inventory of Vehicle Trips During Operation of Proposed Project

Land Use Type in CalEEMod	Vehicle Type	Land Use Size[1]	Daily Trip Generation Rates	
			Trips Rates[2]	Total Daily Trips
Unrefrigerated Warehouse No Rail	Passenger Cars	280.385 TSF	0.6 per TSF	53
Parking Lot	Trucks	1.68 AC	58.93 per AC	99

Notes:
[1] TSF = Thousand Square Foot; AC = Acre.
[2] Daily Trip rates obtained from the Traffic Analysis (EPD Solutions, Inc., 2022).

In order to account for the 9 2-axle trucks, 11 3-axle trucks, and 33 4+axle trucks that were analyzed under the Parking Lot land use, the vehicle mix utilized in CalEEMod was adjusted to match the truck generation rates provided in the Traffic Analysis. In addition, the vehicle mix for the Unrefrigerated Warehouse land use was also adjusted to remove the truck trips from this land use. The vehicle mixes utilized in CalEEMod are shown in Table J. No other changes were made to the CalEEMod default mobile source parameters.

Table J – Fleet Mix During Operation of Proposed Project

Land Use	LDA	LDT1	LDT2	MDV	LHD2	MHD	HHD	MCY
Unrefrigerated Warehouse No Rail (Passenger Cars)	0.579	0.060	0.186	0.149	0	0	0	0.026
Parking Lot (Trucks)	0	0	0	0	0.170	0.208	0.622	0

Notes:
LDA = Light Duty Auto; LDT1 = Light-Duty Trucks (less than 3,750 pounds gross vehicle weight rating [GVWR]); LDT2 = Light-Duty Trucks (3,751 to 6,000 pounds GVWR); MDV = Medium-Duty Trucks (6,000 to 8,500 pounds GVWR); LHD2 = Light-Heavy-Duty Trucks 2 (GVWR 10,001 to 14,000 pounds); MHD = Medium-Heavy-Duty Trucks (GVWR 19,501 to 33,000 pounds); HHD = Heavy-Heavy-Duty Trucks (GVWR 33,000+ pounds); and MCY = motorcycles.
[1] The Parking Lot Truck fleet mix was based on the Truck Fleet Mix provided in the Traffic Analysis (EPD Solutions, Inc., 2022), with 2-axle trucks analyzed as LHD2, 3-axle trucks analyzed as MHD, and 4+-axle trucks analyzed as HHD.

Area Sources

Area sources include emissions from consumer products, landscape equipment, and architectural coatings. The area source emissions were based on the on-going use of the proposed project in 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 ongoing use of the proposed 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 from the proposed project as well as the GHG emissions from the waste once it is interred into a landfill. The analysis was based on the default CalEEMod waste generation rates. 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. No changes were made to the default water and wastewater parameters in CalEEMod.

The CalEEMod "mitigation" of the use of low flow faucets and toilets and use low water use average plant type and spray heads were selected to account for the implementation of the 2019 CCR Title 24 Part 11 (CalGreen) requirements.

Off-Road Equipment

The primary activity that would require the use of off-road equipment would be associated with forklifts unloading/loading of truck deliveries. As detailed above, operation of the proposed project is anticipated to generate 53 daily truck trips. Based on 15 minutes of unloading/loading activities per truck trip, this would result in 13.25 hours of forklift activities per day, which was analyzed in CalEEMod as two forklifts operating 7 hours per day. In order to account for Project Design Feature 1, that restricts the operation of diesel-powered off-road equipment on the project site during long-term operations of the project, the forklifts were analyzed as being powered with compressed natural gas (CNG).

Diesel-Powered Fire Pump

The proposed project would require the installation of a diesel-powered fire pump. The diesel-powered fire pump was modeled as a 236 horse-powered engine that would be operational up to 30 minutes per day and 50 hours per year for engine cycling and maintenance activities.

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 K shows the off-road construction equipment fuel calculations based on the above formula. Table K shows that the off-road equipment utilized during construction of the proposed project would consume approximately 27,769 gallons of diesel fuel.

Table K – 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	120	909
Tractors/Loaders/Backhoes	4	84	0.37	8	160	285
Grading						
Excavators	1	36	0.38	8	80	63
Graders	1	148	0.41	8	80	251
Rubber Tired Dozers	1	367	0.4	8	80	606
Tractors/Loaders/Backhoes	3	84	0.37	8	240	428
Building Construction						
Cranes	1	367	0.29	7	1,295	7,115
Forklifts	3	82	0.2	8	4,400	4,179
Generator Sets	1	14	0.74	8	1,480	880
Tractors/Loaders/Backhoes	3	84	0.37	7	3,885	6,930
Welders	1	46	0.45	8	1,480	1,758
Paving						
Cement and Mortar Mixers	2	10	0.56	6	216	69
Pavers	1	81	0.42	8	144	281
Paving Equipment	2	132	0.36	6	216	397
Rollers	2	36	0.38	8	288	226
Tractors/Loaders/Backhoes	1	84	0.37	8	144	257
Architectural Coating						
Air Compressor	1	37	0.48	6	108	110
				Total Off-Road Equipment Diesel Fuel Used during Construction (gallons)		**27,769**

Notes:
[1] Based on: 20 days for Demolition, 5 days for Site Preparation, 10 days for Grading; 185 days for Building Construction; 18 days for Paving; and 18 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 2023 calculated through use of the EMFAC2017 model (https://www.arb.ca.gov/emfac/2017/) and the EMFAC2017 model printouts are shown in Appendix B. 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 L shows the on-road construction vehicle trips modeled in CalEEMod and the fuel usage calculations.

Table L – On-Road Vehicle Trips and Fuel Consumption from Construction of the 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	26.8	207
Vendor Truck (Diesel)	6	10.2	61	1,224	8.7	141
Haul Truck (Diesel)	12.1	20	242	4,840	8.7	556
Site Preparation						
Worker (Gasoline)	18	18.5	333	1,665	26.8	62
Vendor (Diesel)	6	10.2	61	306	8.7	35
Grading						
Worker (Gasoline)	15	18.5	278	2,775	26.8	104
Vendor Truck (Diesel)	6	10.2	61	612	8.7	70
Haul Truck (Diesel)	31.3	20	626	6,260	8.7	720
Building Construction						
Worker (Gasoline)	37	18.5	685	126,633	26.8	4,732
Vendor Truck (Diesel)	15	10.2	153	28,305	8.7	3,254
Paving						
Worker (Gasoline)	20	18.5	370	6,600	26.8	249
Architectural Coating						
Worker (Gasoline)	7	18.5	130	2,331	26.8	87
Total Gasoline Fuel Used from On-Road Construction Vehicles (gallons)						**5,441**
Total Diesel Fuel Used from On-Road Construction Vehicles (gallons)						**4,776**

Notes:
[1] Based on: 20 days for Demolition, 5 days for Site Preparation, 10 days for Grading; 185 days for Building Construction; 18 days for Paving; and 18 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 portion fleet of diesel vehicles.
Source: CalEEMod Version 2022.1; CARB, 2018.

Table L shows that the on-road construction-related vehicle trips would consume approximately 5,441 gallons of gasoline and approximately 4,776 gallons of diesel fuel. As detailed above, Table K shows that the off-road construction equipment would consume approximately 27,769 gallons of diesel fuel. This

would result in the total consumption of approximately 5,441 gallons of gasoline and 32,545 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 241,833 vehicle miles traveled per year from autos and would generate 1,445,435 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 26.8 miles per gallon of gasoline for automobiles and the fleet average rate of 8.7 miles per gallon of diesel for trucks, which was calculated through use of the EMFAC2017 model and based on the year 2023. The EMFAC2017 model printouts are shown in Appendix B. The diesel-powered fire pump fuel use was calculated based on the same formula provided above for off-road equipment and based on a 236 horsepower engine, a 50 percent load factor, and operating for 50 hours per year, which calculated that the fire pump would utilize 305 gallons per year. Based on the above calculation methodology, the operation of automobiles would consume approximately 9,036 gallons of gasoline per year and from trucks and fire pump would consume approximately 166,459 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:

- Parking Lot (Truck Loading Area, Driveways, and Parking Lots) – 64,106 kWh/year
- Unrefrigerated Warehouse – 409,609 kWh/year

Based on the above, it is anticipated that the proposed project would utilize 473,715 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):

- Parking Lot (Truck Loading Area, Driveways, and Parking Lots) – 0 kBTU/year
- Unrefrigerated Warehouse – 1,699,204 kBTU/year

Based on the above, it is anticipated that the proposed project will use approximately 1,699,204 kBTU per year, which is equivalent to 1,699 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 Lakes AERMOD View Version 11.2.0 using the latest version of the AERMOD model (22112) was used for all dispersion modeling. Key dispersion modeling options selected included the regulatory default options and urban modeling option for Riverside County with a population of 2,189,641. Flagpole receptor height was set to 0 meters, which is based on SCAQMD recommended modeling parameters. AERMAP model (16216), the terrain pre-processor for AERMOD, was run with a USGS 7.5-meter map of Perris.

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 Perris Station by the SCAQMD for 2010, 2011, 2014, 2015, and 2016. The SCAQMD processed the data for input to the model. An elevation of 442 meters was utilized for the Perris Station per SCAQMD guidance.

Receptor Grid

The nearest sensitive receptor to the project site is a single-family home located as near as 30 feet to the east of the project site. There are also single-family homes located as near as 780 feet to the north of the project site. Discrete receptors were placed at eight representative nearby sensitive receptors. Figure 4 shows the locations of the sources and receptors modeled in the AERMOD model for TAC emissions.

Building Inputs

In order to account for building downwash (air turbulence caused by wind blowing over the proposed warehouse) attributes associated with the proposed project, the proposed warehouse structure was inputted into the AERMOD model as a polygonal building with a 40-foot height.

EMFAC2017 Model

The truck travel and truck idling emission rates were obtained from the EMFAC2017 model Version 1.0.3. The EMFAC2017 model is the latest emissions inventory model released by CARB that has been approved by the EPA that calculates motor vehicle emissions from vehicles operating on roads in California. The EMFAC2017 includes the latest data on California's car and truck fleets and travel activity and also reflects the emissions reductions associated with CARB's recent rulemaking, including on-road diesel fleet rules, Advanced Clean Car Standards, and the Smartway/Phase I Heavy-Duty Vehicle GHG Regulations.

The operational 3-axle and 4+-axle truck trips were modeled in the EMFAC2017 model through use of the Truck 2 Vehicle Category that covers all truck classifications over 14,000 pounds. The operational 2-axle (small truck) trips were modeled in the EMFAC2017 model through use of the Truck 1 Vehicle Category that covers all truck classifications between 8,500 and 14,000 pounds. Since vehicle emission factors are

dependent on vehicle speed, emission factors were obtained for 10 and 35 miles per hour and idling rates. The EMFAC2017 model run printout is provided in Appendix B.

The cancer risk analysis is based on a 30-year analysis period. Therefore, the analysis period was segmented into three 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 emission 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 M; the DPM PM10 truck idling emission rates utilized in this assessment are shown in Table N.

Table M – EMFAC2017 Diesel Truck Running PM10 Emission Rates

Vehicle Class	Speed (mph)	EMFAC2017 PM10 Running Emissions Rates (grams/mile)			
		2023 to 2024	2024 to 2026	2027 to 2041	2042 to 2053
Truck 1[(1)]	10	0.0505	0.0460	0.0275	0.0169
	35	0.0186	0.0177	0.0120	0.0084
Truck 2[(2)]	10	0.0098	0.0097	0.0087	0.0083
	35	0.0075	0.0075	0.0072	0.0070

Notes:
[1] Truck 1 Vehicle Class covers all trucks between 8,500 and 14,000 pounds.
[2] Truck 2 Vehicle Class covers all trucks greater than 14,000 pounds.
Source: EMFAC2017 version 1.0.3.

Table N – EMFAC2017 Diesel Truck Idling PM10 Emission Rates

Vehicle Class	EMFAC2017 PM10 Idling Emissions Rates (grams/hour)			
	2023 to 2024	2023 to 2025	2027 to 2041	2042 to 2053
Truck 1	0.786	0.787	0.790	0.796
Truck 2	0.014	0.013	0.011	0.010

Source: EMFAC2017 version 1.0.3.

TAC Emission Sources

The proposed project would create DPM emissions from both construction and operational activities, which have been modeled separately and are described below.

Construction-Related DPM Emissions

Construction activities would generate DPM emissions from off-road construction equipment operating on the project site and from diesel truck trips to the project site. Since construction activities would typically be limited to a 9-hour workday, all sources modeled in AERMOD for the construction scenario were set to be operational between the hours of 7 a.m. and 4 p.m. and the calculated emissions rates were set so that daily emissions are averaged over nine hours, instead of 24 hours. Construction of the proposed project has been modeled as starting November, 2023 and would be completed in 10 months. All construction activities have been assumed to occur in the first analysis period of the third trimester of a pregnancy to 2 years of age.

Off-Road Construction Equipment DPM Emissions

TAC emissions from construction activities would be primarily from DPM emissions associated with the onsite operation of off-road diesel equipment. The off-road equipment exhaust emissions that would be created from construction of the proposed project has been calculated by the CalEEMod Model, based on the parameters detailed in the Air Report for the criteria pollution analysis. Although DPM would typically be in the form of PM2.5, which is a subset of PM10, in order to provide a conservative analysis, this analysis has analyzed the exhaust PM10 emissions as DPM emissions. The CalEEMod model (see Appendix A) calculated that the off-road equipment would generate a total of 0.07 tons of PM10 exhaust emissions or 0.455 pounds (206.18 grams) of PM10 per day averaged over the 10-month (308 day) construction period.

The off-road construction equipment was modeled as a point source located approximately in the middle of the project site. The point source was modeled in the AERMOD model with a 13-foot height, a 0.1-meter diameter, a velocity of 50 meters per second, a temperature of 366°K and an emission rate of 6.36E-03 grams per second, which is based on a 9-hour workday. The placement of the off-road equipment point source in the AERMOD model is shown in Figure 4.

Construction-Related Truck Running Emissions

A summary of the construction-related truck trips is shown in Table 6. The truck trips represent one-way trips (i.e., either to or from project site).

Table O – Project Construction Haul and Material Delivery Truck Trips

Construction Phase	Total Truck Trips per Construction Phase
Demolition	362
Site Preparation	30
Grading	373
Combined Building Construction, Paving and Architectural Coatings	2,775
Total Construction Truck Trips from the Proposed Project	3,540
Truck Trips per Day Averaged over duration of Construction[1]	**11.5**
Truck Deliveries per Day Averaged over duration of Construction[2]	**5.7**

Notes:
[1] Average truck trips per day calculated by dividing the 5,551 truck trips by 308 days (duration of construction).
[2] Each truck delivery will require a trip to project site and trip leaving project site.
Source: CalEEMod Model Version 2022.1 (see Appendix A).

The construction-related truck trips are anticipated to access the project site from Interstate 215, utilizing the same path as the operational trips, which is detailed in the *Markham, Perris – DPR22-00020 Proposed Truck Route Memorandum*, prepared by EPD Solutions, Inc., September 19, 2022 and consists of all trucks traveling on Harley Knox Boulevard to Webster Avenue to Markham Street and entering the project via the west project driveway. The onsite truck travel was modeled as each truck entering the west project driveway, driving to the center of the project site and then exiting the project site via the east project driveway. It should be noted that trucks are restricted from using the proposed eastern driveway, so this pattern provides for a worst-case analysis that will most likely not occur.

The truck travel emissions were modeled in the AERMOD model by using line volume sources. The line volume sources were modeled with a plume height of 6 feet and plume width of 12 feet for the onsite path and a 30-foot width on Webster Avenue and Markham Street. The emission rates utilized in the

AERMOD model were obtained from the EMFAC2017 model for the Truck 2 vehicle class, which represents all trucks greater than 14,000 pounds. The emissions rates 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 9 hours. The road source emissions rates entered into the AERMOD model are shown in Table P. The placement of the construction-related truck travel line volume sources in the AERMOD model is shown in Figure 4.

Table P – AERMOD Model Construction-Related Truck Travel Emissions Sources

Source ID	Description	Daily Truck Trips[1]	Length of Road (Meters)	DPM Emission Rates (grams/second)
RDOFF	Construction Trucks Offsite	11.5	808	1.34E-06
RDONCO	Construction Trucks Onsite	5.7	261	2.81E-07

Notes:
[1] Daily truck trips on offsite roads based on one way trips and for the onsite loop road based on truck deliveries that represent two trips, one entering and one leaving the site.
Source: EMFAC2017

Construction-Related Truck Idling Emissions

The construction diesel truck idling was modeled as a point source located approximately in the middle of the project site. The analysis was based on an average of 5.7 construction truck deliveries per day, with each truck delivery idling on the project site for 10 minutes (5 minutes per trip). 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 emissions factor used for the truck idling point source was based on the EMFAC2017 years 2023 to 2024 Idling Emission Rate of 0.014 grams per hour (see Table N, above). The idling point source was modeled in the AERMOD model with a 12-foot height, a 0.1-meter diameter, a velocity of 50 meters per second, a temperature of 366°K and an emission rate of 4.01E-07 grams per second, which is based on a 9-hour workday. The placement of the construction idling point source in the AERMOD model is shown in Figure 4.

Operational TAC Emission Sources

Operational DPM emissions would be generated from diesel truck running and idling emissions. The proposed project would also include a diesel-powered fire pump that would create DPM emissions. Project Design Feature 1 requires all off-road equipment used during operation of the project, including forklifts, are required to be non-diesel-powered. As such, no DPM emissions would be created from off-road equipment during operation of the proposed project.

Operational Truck Travel

As detailed above in Section 8.1 and in the Traffic Analysis (EPD Solutions, Inc. 2022), the proposed project would generate 19 2-axle, 26 3-axle, and 69 4+-axle daily truck trips generated by the proposed project. The 19 2-axle truck trips were analyzed based on the Truck 1 and the 44 3-axle and 4+-axle trucks were analyzed based on the Truck 2 emission rates from the EMFAC2017 model. The project-related truck emissions have been analyzed separately for truck travel and truck idling that utilized emission rates from the EMFAC model.

The truck trip route to the project site was obtained from the Traffic Analysis (EPD Solutions, Inc., 2022). 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, since the proposed warehouse will be operational 24 hours per day. The calculated emission rates are shown in Table Q. The diesel truck line volume source truck routes were modeled with a 6-foot plume height, a 3-foot release height, and 12-foot plume width for the onsite travel way and a 30-foot width on Webster Avenue and Markham Street. The placement of the operation-related truck travel line volume sources in the AERMOD model is shown in Figure 5.

Table Q – 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)		
				2024-2026	2027-2041	2042-2053
RDOFF	2-axle Truck Trips	9	808	9.27E-07	6.26E-07	4.40E-07
	3-axle and 4+-axle Truck Trips	44		1.93E-06	1.84E-06	1.79E-06
	Total Truck Travel Offsite	**53**		**2.85E-06**	**2.46E-06**	**2.23E-06**
RDON	2-axle Truck Trips	9	119	3.54E-07	2.12E-07	1.30E-07
	3-axle and 4+-axle Truck Trips	44		3.66E-07	3.28E-07	3.12E-07
	Total Truck Travel Onsite	53		**7.20E-07**	**5.40E-07**	4.42E-07

Notes:
[1] Daily truck trips represent one-way trips (i.e., entering the project site or leaving the project site equal one trip).
Source: EPD Solutions, Inc., 2022.

Operational Truck Idling

The onsite diesel truck idling emissions were modeled as two point sources, with one point source located at the northernmost loading dock and the other point source located at the southernmost loading dock, with the truck idling emissions split evenly between the two point sources. The analysis was based on each truck delivery idling on the project site for 15 minutes or 5 minutes for arriving to the loading area, 5 minutes for leaving the loading area, and 5 minutes for queueing activities at the loading area. 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 3.84-meter height, a 0.1-meter diameter, a velocity of 50 meters per second, and a temperature of 366°K, which were obtained from *Guidance for Air Dispersion Modeling*, prepared by San Joaquin Valley Air Pollution Control District. The idling point source emission rates entered into the AERMOD model are shown in Table R. The idling source emissions were determined by multiplying 15 minutes by the daily truck operations and dividing it by 24 hours in order to determine the percent of daily idling time. The daily idling time was then multiplied by the EMFAC2017 emissions rates that are detailed above and were converted to grams per second. The placement of the operational idling point source in the AERMOD model is shown in Figure 5.

Table R – AERMOD Model Operational DPM Truck Idling Emissions Sources

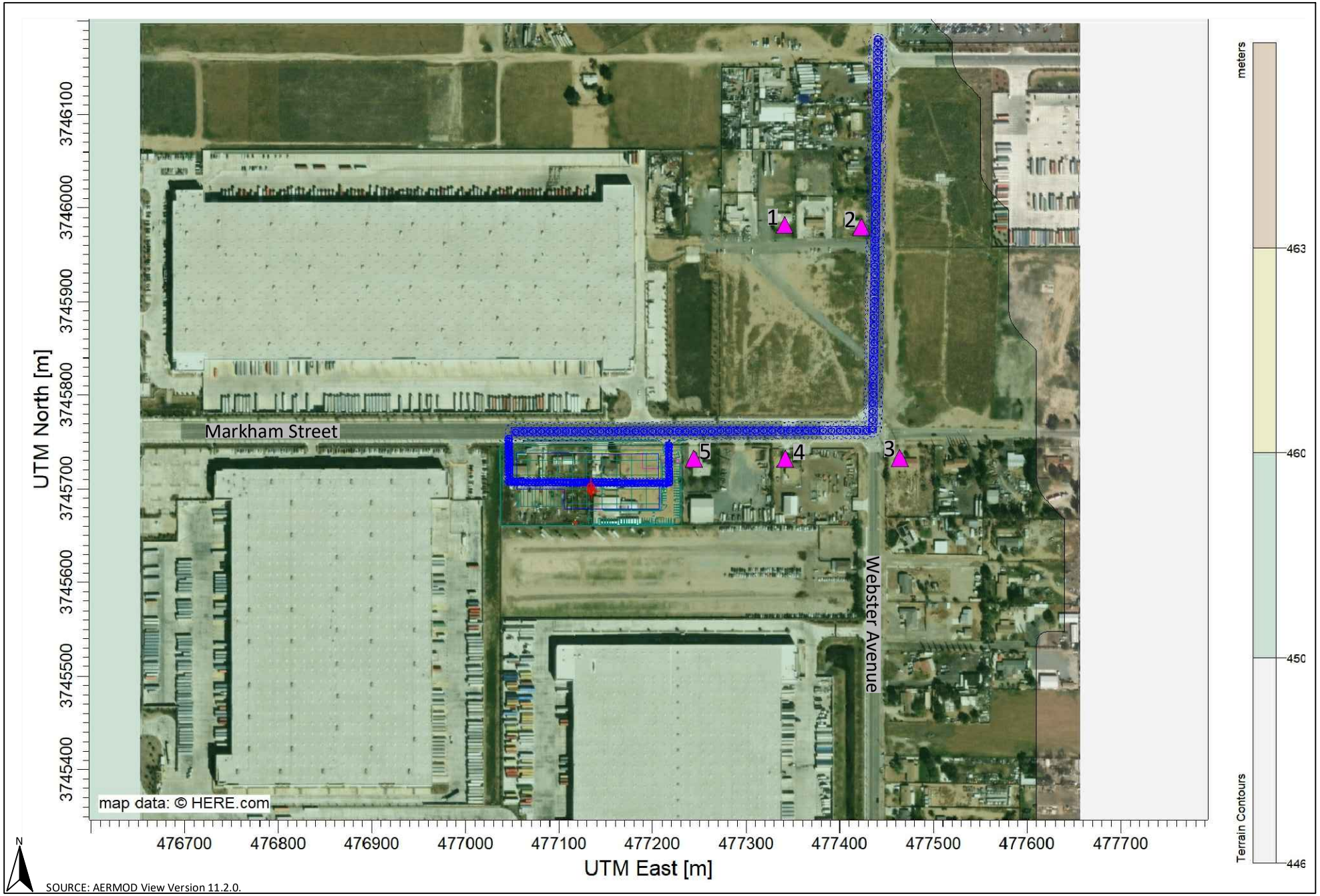
Source ID	Description	Daily Truck Deliveries[1]	DPM Emission Rates (grams/second)		
			2024-2026	2027-2041	2042-2053
IDLE	2-axle Truck Trips	4.5	1.02E-05	1.03E-05	1.049E-05
	3-axle and 4+-axle Truck Trips	22.0	8.27E-07	6.88E-07	6.38E-07
	Total Idling	**26.5**	**1.11E-05**	**1.10E-05**	**1.10E-05**

Notes:

[1] Each daily truck delivery represent two trips (i.e., one entering the project site and one leaving the project site).
Source: EMFAC2017; EPD Solutions, Inc., 2022.

Operational Fire Pump

The onsite diesel fire pump emissions was modeled as a point source located on the east side of the proposed warehouse, with the diesel-engine exhaust vent on the roof. The DPM emissions from the fire pump were based on the CalEEMod model run (see Appendix A) that calculated that the fire pump would create an average of 0.01 pound per day of PM10 emissions. This was converted to an emission rate of 5.25 E-05 grams per second that was entered into AERMOD. The point source was modeled with a 48-foot height (exhaust vent runs to on top of roof), a 0.1-meter diameter stack, a velocity of 50 meters per second, and a temperature of 366°K.



SOURCE: AERMOD View Version 11.2.0.

VISTA ENVIRONMENTAL

Figure 4
AERMOD Model Construction Sources and Receptors Placement

SOURCE: AERMOD View Version 11.2.0.

VISTA ENVIRONMENTAL

Figure 5
AERMOD Model Operational 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 S.

Table S – 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 7.3, the project site is located within SRA 24, which covers the Perris Valley area. The Look-Up Tables provided in the LST Methodology include project site acreage sizes of 1-acre, 2-acres and 5-acres. Since the 4.06-acre project site is between the 2-acre and 5-acre sizes, the 2-acre and 5-acre thresholds were interpolated in order to develop the threshold for a 4.06-acre project site. The nearest sensitive receptor is a single-family home located as near as 30 feet (9 meters) to the east 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 T below shows the LSTs for NO_2, PM10 and PM2.5 for both construction and operational activities.

Table T – SCAQMD Local Air Quality Thresholds of Significance

Activity	Allowable Emissions (pounds/day)[1]			
	NOx	CO	PM10	PM2.5
Construction	239	1,360	11	7
Operation	239	1,360	3	2

Notes:
[1] The nearest sensitive receptor to the project site is a single-family home located as near as 30 feet (9 meters) east 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 two and five acres in SRA 24, Perris 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 both construction and operation of 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 2018 amendments and additions to the CEQA Guidelines now 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 2020 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, the current CEQA Guidelines, provide the following direction on how to analyze a project's energy consumption:

> "If analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, the EIR shall mitigate that energy use. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. (Guidance on information that may be included in such an analysis is presented in Appendix F.) This analysis is subject to the rule of reason and shall focus on energy use that is caused by the project. This analysis may be included in related analyses of air quality, greenhouse gas emissions, transportation or utilities in the discretion of the lead agency."

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

There are several unique challenges to analyzing greenhouse gas emissions and climate change under CEQA, largely because of climate change's "global" nature. Typical CEQA analyses address local actions that have local—or, at most, regional—impacts, whereas climate change presents the considerable challenge of analyzing the relationship between local activities and the resulting potential, if any, for global environmental impacts. Most environmental analyses examine the "project-specific" impacts that a particular project is likely to generate. With regard to global warming, however, it is generally accepted that while the magnitude of global warming effects may be substantial, the GHG emissions from a single general development project would have no noticeable effect on global climate.

Global climate change is also fundamentally different from other types of air quality impact analyses under CEQA in which the impacts are all measured within, and are linked to, a discrete region or area. Instead, a global climate change analysis must be considered on a global level, rather than the typical local or

regional setting, and requires consideration of not only emissions from the project under consideration, but also the extent of the displacement, translocation, and redistribution of emissions. In the usual context, where air quality is linked to a particular location or area, it is appropriate to consider the creation of new emissions in that specific area to be an environmental impact whether or not the emissions are truly "new" emissions to the overall globe. When the impact is a global one, however, it makes more sense to consider whether the emissions really are new emissions or are merely being moved from one place to another. For example, the approval of a new developmental plan or project does not necessarily create new automobile drivers - the primary source of a land use project's emissions. Rather, due to the "relocation" factor, new land use projects sometimes merely redistribute existing mobile emissions; accordingly, the use of models that measure overall emissions increases without accounting for existing emissions will substantially overstate the impact of the development project on global warming. This makes an accurate analysis of GHG emissions substantially different from other air quality impacts, where the "addition" of redistributed emissions to a new locale can make a substantial difference to overall air quality.

For GHG emissions and global warming, there is not, at this time, one established, universally agreed-upon "threshold of significance" by which to measure an impact. While the CARB published some draft thresholds in 2008, they were never adopted, and the CARB recommended that local air districts and lead agencies adopt their own thresholds for GHG impacts.

As discussed previously, the SCAQMD has been evaluating GHG significance thresholds since April 2008. In December 2008, the SCAQMD Governing Board adopted an interim 10,000 $MTCO_2e$ per year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. The SCAQMD continued to consider adoption of significance thresholds for development projects where the SCAQMD is not the lead agency. 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 included significance thresholds of 10,000 $MTCO_2e$ for all industrial projects, 3,500 $MTCO_2e$ for residential uses, 1,400 $MTCO_2e$ for commercial uses, and 3,000 $MTCO_2e$ for mixed uses. Alternatively, a lead agency has the option to use 3,000 $MTCO_2e$ per year as a threshold for all non-industrial projects. Although both options are recommended by the SCAQMD, a lead agency is advised to use only one option and to use it consistently.

The thresholds identified above have not been adopted by the SCAQMD or distributed for widespread public review and comment, and the working group tasked with developing the thresholds has not met since September 2010. The future schedule and likelihood of threshold adoption is uncertain.

It should be noted that SCAQMD's Working Group's thresholds were prepared prior to the issuance of Executive Order B-30-15 on April 29, 2015 that provided a reduction goal of 40 percent below 1990 levels by 2030. This target was codified into statute through passage of AB 197 and SB 32 in September 2016. However it should be noted that the California Supreme Court's ruling on *Cleveland National Forest Foundation v. San Diego Association of Governments* (Cleveland v. SANDAG), Filed July 13, 2017 stated:

> SANDAG did not abuse its discretion in declining to adopt the 2050 goal as a measure of significance in light of the fact that the Executive Order does not specify any plan or implementation measures to achieve its goal. In its response to comments, the EIR said: "It is uncertain what role regional land use and transportation strategies can or should play in achieving the EO's 2050 emissions reduction target. A recent California Energy Commission report concludes, however, that the primary strategies to achieve this target should be major

> ‘decarbonization’ of electricity supplies and fuels, and major improvements in energy efficiency [citation].

Although, the above court case was referencing California’s GHG emission targets for the year 2050, at this time it is also unclear what role land use strategies can or should play in achieving the AB 197 and SB 32 reduction goal of 40 percent below 1990 levels by 2030

In the absence of other thresholds of significance promulgated by the SCAQMD, the City of Perris has been using the SCAQMD’s adopted 10,000 $MTCO_2e$ threshold for industrial projects and the SCAQMD’s draft thresholds for non-industrial projects the purpose of evaluating the GHG impacts associated with proposed general development projects. The City’s use of the 10,000 $MTCO_2e$ per year threshold is also considered to be conservative since it is being applied to all of the GHG emissions generated by the project (i.e., area sources, energy sources, vehicular sources, solid waste sources, and water sources) whereas the SCAQMD’s 10,000 $MTCO_2e$ per year threshold applies only to the new stationary sources generated at industrial facilities.

The GHG emissions analysis for both construction and operation of the proposed project can be found below in Sections 10.8 and 10.9.

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 2016 AQMP. The following section discusses the proposed project's consistency with the 2016 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. The 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 City of Perris General Plan's Land Use Plan and more specifically PVCCSP defines the assumptions that are represented in AQMP.

The project site is currently designated Light Industrial (LI) in the PVCCSP. The proposed industrial building project is an allowed use under the Light Industrial General Plan land use designation. Since the proposed project would not require a Specific 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 4.06 gross acre project site, building construction of the warehouse, paving of the truck loading area, driveways, and parking lots, and application of architectural coatings. The construction emissions have been analyzed for both regional and local air quality impacts.

Construction-Related Regional Impacts

CalEEMod has been utilized to calculate the construction-related regional emissions from the proposed project and the input parameters utilized in this analysis have been detailed in Section 8.1. The worst-case summer or winter daily construction-related criteria pollutant emissions from the proposed project for each phase of construction activities are shown below in Table U and the CalEEMod daily printouts are shown in Appendix A. Since it is possible that building construction, paving, and architectural coating

activities may occur concurrently towards the end of the building construction phase, Table U also shows the combined regional criteria pollutant emissions from building construction, paving and architectural coating phases of construction.

Table U – Construction-Related Regional Criteria Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
Demolition[1]						
Onsite[2]	0.72	17.30	18.20	0.03	1.46	0.81
Offsite[3]	0.10	1.35	1.34	0.01	0.09	0.05
Total	**0.82**	**18.65**	**19.54**	**0.04**	**1.55**	**0.86**
Site Preparation[1]						
Onsite[2]	0.90	24.00	28.30	0.05	6.05	3.47
Offsite[3]	0.10	0.34	1.27	<0.01	0.02	0.01
Total	**1.00**	**24.34**	**29.57**	**0.05**	**6.07**	**3.48**
Grading[1]						
Onsite[2]	0.53	14.10	17.80	0.03	2.44	1.43
Offsite[3]	0.12	2.98	1.72	0.01	0.21	0.11
Total	**0.65**	**17.08**	**19.52**	**0.04**	**2.65**	**1.54**
Combined Building Construction, Paving, and Architectural Coatings						
Onsite	47.99	20.03	24.13	0.03	0.89	0.81
Offsite	0.34	0.89	5.57	<0.01	0.09	0.02
Total	**48.33**	**20.92**	**29.70**	**0.04**	**0.98**	**0.83**
Maximum Daily Construction Emissions	**48.33**	**24.34**	**29.70**	**0.05**	**6.07**	**3.48**
SCQAMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	No	No	No	No	No

Notes:
[1] Demolition, Site Preparation and Grading based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.
[2] Onsite emissions from equipment not operated on public roads.
[3] Offsite emissions from vehicles operating on public roads.
Source: CalEEMod Version 2022.1 (see Appendix A).

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

Construction-Related Localized Impacts

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

The local air quality emissions from construction were analyzed through utilizing the methodology described in the LST Methodology, prepared by the SCAQMD, revised October 2009. The LST Methodology found the primary criteria pollutant emissions of concern are NOx, CO, PM10, and PM2.5. In order to determine if any of these pollutants require a detailed analysis of the local air quality impacts,

each phase of construction was screened using the SCAQMD's Mass Rate LST Look-up Tables. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily onsite emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality.

Table V shows the onsite emissions from CalEEMod for the different construction phases and the calculated localized emissions thresholds that have been detailed above in Section 9.2. Since it is possible that building construction, paving, and architectural coating activities may occur concurrently towards the end of the building construction phase, Table V also shows the combined local criteria pollutant emissions from building construction, paving and architectural coating phases of construction.

Table V – Construction-Related Localized Criteria Pollutant Emissions

Construction Phase	Pollutant Emissions (pounds/day)[1]			
	NOx	CO	PM10	PM2.5
Demolition[2]	17.47	18.37	1.47	0.82
Site Preparation[2]	24.04	28.46	6.05	3.47
Grading[2]	14.47	18.02	2.47	1.44
Combined Building Construction, Paving and Architectural Coatings	8.25	10.12	0.39	0.35
Maximum Daily Construction Emissions	**24.04**	**28.46**	**6.05**	**3.47**
SCAQMD Local Construction Thresholds[3]	**239**	**1,360**	**11**	**7**
Exceeds Threshold?	No	No	No	No

Notes:
[1] The Pollutant Emissions include 100% of the On-Site emissions (off-road equipment and fugitive dust) and 1/8 of the Off-Site emissions (on road trucks and worker vehicles), in order to account for the on-road emissions that occur within a ¼ mile of the project site.
[2] Demolition, Site Preparation and Grading phases based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.
[3] The nearest sensitive receptor to the project site is a single-family home located as near as 30 feet (9 meters) east 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 two and five acres in SRA 24, Perris Valley.

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

Operational Emissions

The 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, onsite area source emissions, and off-road equipment created from the on going use of the proposed project. The following section provides an analysis of potential long-term air quality impacts due to regional air quality and local air quality impacts with the on going operations of the proposed project.

Operations-Related Regional Criteria Pollutant Analysis

The operations-related regional criteria air quality impacts created by the proposed project have been analyzed through use of the CalEEMod 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 W and the CalEEMod daily emissions printouts are shown in Appendix A.

Table W – Operational Regional Criteria Pollutant Emissions

	Pollutant Emissions (pounds/day)					
Activity	**VOC**	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Area Sources[1]	2.78	0.03	3.87	0.00	0.01	0.01
Energy Usage[2]	0.03	0.46	0.38	<0.01	0.03	0.03
Mobile Sources[3]	0.49	13.10	5.23	0.11	2.13	0.63
Off-Road Equipment[4]	<0.01	1.54	15.40	<0.01	<0.01	<0.01
Fire Pump[5]	0.19	0.54	0.49	<0.01	0.03	0.03
Total Emissions	**3.49**	**15.17**	**25.37**	**0.11**	**2.20**	**0.70**
SCQAMD Operational Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	No	No	No	No	No

Notes:
[1] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[2] Energy usage consist of emissions from electricity and natural gas usage.
[3] Mobile sources consist of emissions from vehicles and road dust.
[4] Off-road equipment consists of emissions from forklifts utilized onsite (Project Design Feature 1 restricts the operation of diesel-powered forklifts, so forklifts have been analyzed as CNG-powered.
[5] Fire Pump analyzed based on a 236 horsepower diesel-powered fire pump operational up to 30 minutes in a day.
Source: Calculated from CalEEMod Version 2022.1 (see Appendix A).

The data provided in Table W shows that the analyzed criteria pollutants would be well below the regional emissions thresholds. Therefore, a less than significant regional air quality impact 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 C. 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 U, project-related construction activities would generate a maximum of 48.33 pounds per day of VOC and 24.34 pounds per day of NOx and as shown above in Table W, operation of the proposed project would generate 3.49 pounds per day of VOC and 15.17 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 to 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.

Operations-Related Local Air Quality Impacts

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

regional impact to the Air Basin. The proposed project has been analyzed for the potential local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from on-site operations. The following analyzes the vehicular CO emissions and local impacts from on-site operations.

Local CO Hotspot Impacts from Project-Generated Vehicular Trips

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

At the time of the 1993 Handbook, the Air Basin was designated nonattainment under the CAAQS and NAAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Air Basin and in the state have steadily declined. In 2007, the Air Basin was designated in attainment for CO under both the CAAQS and NAAQS. SCAQMD conducted a CO hot spot analysis for attainment at the busiest intersections in Los Angeles during the peak morning and afternoon periods 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, no local CO Hotspot are anticipated to be created from the proposed project and no CO Hotspot modeling was performed. Therefore, a less than significant long-term air quality impact is anticipated to local air quality with the on-going use of the proposed project.

Local Criteria Pollutant Impacts from Onsite Operations

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

The local air quality emissions from onsite operations were analyzed using the SCAQMD's Mass Rate LST Look-up Tables and the methodology described in LST Methodology. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality. Table X shows the onsite emissions from the CalEEMod model that includes area sources, energy usage, onsite off-road equipment, and vehicles operating in the immediate vicinity of the project site and the calculated emissions thresholds.

[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.

Table X – Operations-Related Localized Criteria Pollutant Emissions

Onsite Emission Source	Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Area Sources	0.03	3.87	0.01	0.01
Energy Usage	0.46	0.38	0.03	0.03
Mobile Sources[1]	1.58	0.65	0.27	0.08
Off-Road Equipment[2]	1.54	15.40	<0.01	<0.01
Fire Pump	0.54	0.49	0.03	0.03
Total Emissions	**4.15**	**20.79**	**0.34**	**0.15**
SCAQMD Local Operational Thresholds[5]	**239**	**1,360**	**3**	**2**
Exceeds Threshold?	No	No	No	No

Notes:
[3] Mobile sources based on 1/8 of the gross vehicular emissions, which is the estimated portion of vehicle emissions occurring within a quarter mile of the project site.
[2] Off-road equipment consists of emissions from forklifts utilized onsite (Project Design Feature 1 restricts the operation of diesel-powered forklifts, so forklifts have been analyzed as CNG-powered.
[5] The nearest sensitive receptor to the project site is a single-family home located as near as 30 feet (9 meters) east 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 two and five acres in SRA 24, Perris Valley.

The data provided in Table X shows that the on going operations of the proposed project would not exceed the LSTs 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 localized air quality due to onsite emissions and no mitigation would be required.

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

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 receptor to the project site is a single-family home located as near as 30 feet to the east of the project site. There are also single-family homes located as near as 780 feet to the north of the project site.

The proposed project would have the potential to expose sensitive receptors to substantial pollutant concentrations of localized criteria pollutant concentrations, vehicular CO emissions, and from toxic air contaminant emissions that include DPM emissions from off-road equipment and from diesel trucks as well as from asbestos emissions associated with demolition of the existing structures.

Local Criteria Pollutant Impacts

The local air quality impacts from construction and operation of the proposed project have been analyzed above in Section 10.3, which found that construction and 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, construction and operation of the proposed project would create a less than significant impact to local air quality and no mitigation would be required.

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, the proposed project would create a less than significant local CO hotspots impact.

Diesel Particulate Matter Emissions Impacts

The proposed project consists of development of a warehouse that would generate DPM emissions during construction from off-road diesel-powered equipment and from diesel-powered trucks delivering equipment and building materials to the project site and during operation of the proposed warehouse from diesel-powered trucks. The proposed project would also include a diesel-powered fire pump that would create DPM emissions. Per Project Design Feature 1, all off-road equipment utilized during operation of the proposed warehouse is required to be non-diesel powered. As such, no DPM emissions would be created from operational off-road equipment.

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 ($\mu g/m^3$)] = (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 Y.

Table Y – DPM Cancer Risk Calculation Parameters

Parameter	Construction	Operations		
	2023 – 2024 (3rd Trimester to 7 months)	2024 – 2026 (7 months to 2 years)	2027 – 2041 (2 to 16 years)	2042 – 2053 (16 to 30 years)
Cancer Potency Factor (mg/kg-day) for DPM	1.1	1.1	1.1	1.1
Daily Breathing Rate (L/kg body weight-day)	871(1)	1,090	572	261
Inhalation Absorption Factor	1	1	1	1
Exposure Frequency (days/year)	350	350	350	350
Exposure Duration (years)	0.83	2.25	14	13.75
Age Sensitivity Factor	10	10	3	1
Fraction of Time at Home	1.0	1.0	1.0	0.73
Averaging Time[2] (days)	25,550	25,550	25,550	25,550
Potential Cancer Risk =	C_{air} * 109	C_{air} * 233	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 7 months (OEHHA, 2015; SCAQMD, 2017).
[2] Based on a 70-year average lifetime (OEHHA, 2015; SCAQMD, 2017)

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

Table Z – Project DPM Emissions Cancer Risks at Nearby Sensitive Receptors

Sensitive Receptor[1]	Receptor Location		Annual DPM (PM10) Concentration (µg/m³)				Cancer Risk Per Million People[2]
	X	Y	Construction 2023-2024	Operations 2024-2026	Operations 2027-2041	Operations 2042-2053	
1	477,341	3,745,982	0.0046	0.0006	0.0006	0.0003	0.9
2	477,423	3,745,980	0.0033	0.0009	0.0008	0.0005	0.9
3	477,464	3,745,733	0.0040	0.0006	0.0005	0.0003	0.8
4	477,342	3,745,732	0.0100	0.0009	0.0009	0.0004	1.6
5	477,244	3,745,732	0.0329	0.0011	0.0011	0.0006	4.3
					Threshold of Significance		**10**
					Exceed Threshold?		**No**

Notes:
[1] The locations of each Sensitive Receptor are shown above in Figures 4 and 5.
[2] The residential cancer risk based on: C_{air} (2023-2024) * 109 + C_{air} (2023-2025) * 233 + C_{air} (2026-2040) * 362 + C_{air} (2041-2052) * 39.5.
Source: Calculated from ISC-AERMOD View Version 11.2.0.

Table Z shows that the cancer risk from construction and operation of the proposed project's DPM emissions would be as high as 4.3 per million persons at Receptor 5 that is located at the home located as

near as 30 feet to the east 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, construction and operation of the proposed project would result in a less than significant impact due to the cancer risk from DPM 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 Z, the AERMOD model found that the highest annual off-site concentration from either construction or operation of the proposed project is 0.0329 $\mu g/m^3$ for DPM chronic non-cancer risk emissions. The resulting Hazard Index is:

$$HI_{DPM} = 0.0329 / 5 = 0.00122$$

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.

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

Based on the above, construction and 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 warehouse. Operation of the proposed project may create odors from diesel-powered truck and fire pump emissions, and from trash storage bins. Pursuant to City regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Diesel truck emissions odors would be generated intermittently from truck loading and unloading activities at the project site and would not likely be noticeable for extended periods of time beyond the project site boundaries. The diesel-powered fire pump would only operate for approximately 30 minutes per week for maintenance cycling and would include an exhaust stack with a diesel particulate filter that would limit the exhaust and associated odors to negligible levels. Due to the distance of the nearest receptors from the project site and through compliance with SCAQMD's Rule 402 and City trash storage regulations, no significant impact related to odors would occur during the on-going operations of the proposed project. Therefore, a less than significant odor impact would occur and no mitigation would be required.

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 are 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 2021, Riverside County consumed 16,767 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

4 Obtained from: http://www.ecdms.energy.ca.gov/elecbycounty.aspx

fuel. Natural gas is measured in terms of cubic feet. In 2021, Riverside County consumed 430.84 Million Therms of natural gas[5].

Petroleum-based fuels currently account for a majority of the 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 2017, 1,052 million gallons of gasoline and 148 million gallons of diesel was sold in Riverside County[6].

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 4.06 gross acre project site, building construction of the warehouse, paving of the truck loading area, driveways, and parking lots, 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

5 Obtained from: http://www.ecdms.energy.ca.gov/gasbycounty.aspx
6 Obtained from: https://ww2.energy.ca.gov/almanac/transportation_data/gasoline/

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 in the vicinity of 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 is currently has natural gas service in the vicinity of 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 5,441 gallons of gasoline and 32,545 gallons of diesel fuel. This equates to 0.0005 percent of the gasoline and 0.022 percent of the diesel used annually in Riverside 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. As detailed above in Section 8.3 the proposed project would consume approximately 473,715 kilowatt-hours per year of electricity. This equates to 0.0028 percent of the electricity consumed annually in Riverside 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 City 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 warehouse, including enhanced insulation, use of energy efficient lighting and appliances as well as requiring a variety of other energy-efficiency measures to be incorporated into the proposed structure. Therefore, it is anticipated the proposed project will be designed and built to minimize electricity use 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 1,699 MBTU per year of natural gas. This equates to 0.0039 percent of the natural gas consumed annually in Riverside 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 warehouse, 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 9,036 gallons of gasoline per year from automobile vehicle travel and 166,459 gallons of diesel per year from truck travel and the fire pump. This equates to 0.0009 percent of the gasoline and 0.11 percent of the diesel consumed annually in Riverside 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 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 City related to Air Quality, Greenhouse Gas Emissions (GHG), Transportation/Circulation, and Water Supply. Additionally, the proposed project would be constructed in accordance with all applicable City 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 *City of Perris General Plan Conservation Element*, adopted February 18, 2008. The proposed project's consistency with the applicable energy-related policies in the General Plan are shown in Table AA.

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

Policy No.	General Plan Policy	Proposed Project Implementation Actions
VIII.A	Adopt and maintain development regulations that encourage water and resource conservation.	**Consistent.** The proposed warehouse will utilize water fixtures that are sold in California that are required to meet CCR Title 20, Sections 1601 – 1608 that require all water fixtures to be low flow and the landscaping will be designed to meet the 2019 Title 24 Part 11 CalGreen building standards that require the project to utilize water efficient irrigation systems.
VIII.B	Adopt and maintain development regulations that encourage recycling and reduced waste generation by construction projects.	**Consistent.** The proposed warehouse will be designed to meet the CalGreen building standards that require a minimum of 65 percent of construction waste to be reused or recycled.
VIII.C	Adopt and maintain development regulations which encourage increased energy efficiency in	**Consistent.** The proposed warehouse will be designed to meet the 2019 Title 24 Part 6 building

Policy No.	General Plan Policy	Proposed Project Implementation Actions
	buildings, and the design of durable buildings that are efficient and economical to own and operate. Encourage green building development by establishing density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who meet LEED building standards for new and refurbished developments (U.S. Green Building Council's Leadership in Energy and Environmental Design green building programs).	standards that require the installation of enhanced insulation, energy efficient lights, appliances and ventilation systems and occupant sensors that will increase the energy efficiency of the proposed warehouse.
VIII.D	Educate and promote the health and productivity benefits for residents, workers and visitors to the City that can be achieved through Green Building techniques and conservation of resources	**Not Applicable.** This policy is for the City to implement, however as detailed above the proposed warehouse will be designed with Green Building techniques in order to conserve resources.
IX.A	Encourage land uses and new development that support alternatives to the single occupant vehicle.	**Consistent.** The proposed project would be required to comply with Mitigation Measure Air-14 from the PVCCSP DEIR that requires the project to designate parking spaces for high-occupancy vehicles and to provide large parking spaces to accommodate vans used for ridesharing. In addition, the project site is in close proximity to existing sidewalks that will promote alternative forms of transportation to the single occupant vehicle.
X.A	Establish density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who exceed current Title 24 requirements for new development.	**Consistent.** The proposed project will be designed to exceed the current Title 24 requirements.
X.B	Encourage the use of trees within project design to lessen energy needs, reduce the urban heat island effect, and improve air quality throughout the region.	**Consistent.** The proposed project will be required to meet the requirements in Section 19.69.030 of the City's Development Code that requires the planting of trees in parking lots.
X.C	Encourage strategic shape and placement of new structures within new commercial and industrial projects.	**Consistent.** The proposed structures will be designed to meet the 2019 Title 24 Part 6 building standards that require the warehouse to be oriented in a north south alignment in order to minimize energy use.

Source: City of Perris, 2008.

As shown in Table AA, 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 warehouse. 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 BB and the CalEEMod model 2022.1 run annual printouts are provided in Appendix A.

Table BB – Project Related Greenhouse Gas Annual Emissions

	Greenhouse Gas Emissions (Metric Tons per Year)			
Category	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Area Sources[1]	1.80	<0.01	0.00	1.86
Energy Usage[2]	204.00	0.02	<0.01	205.00
Mobile Sources[3]	1,977.00	0.03	0.29	2,067.00
Off-Road Equipment[4]	40.30	<0.01	0.00	40.30
Fire Pump[5]	4.49	<0.01	0.00	4.51
Solid Waste[6]	7.46	0.75	0.00	26.10
Water and Wastewater[7]	36.90	0.61	0.01	56.60
Refrigeration	--	--	--	393.00
Construction[8]	14.69	<0.01	<0.01	14.86
Total Emissions	2,286.64	1.41	0.30	**2,809.23**
SCAQMD Draft Threshold of Significance				**10,000**
Exceed Thresholds?				**No**

Notes:
[1] Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.
[2] Energy usage consists of GHG emissions from electricity and natural gas usage.
[3] Mobile sources consist of GHG emissions from vehicles.
[4] Off-road equipment consists of emissions from forklifts utilized onsite (Project Design Feature 1 restricts the operation of diesel-powered forklifts, so forklifts have been analyzed as CNG-powered.
[5] Fire Pump analyzed based on a 236 horsepower diesel-powered fire pump operational up to 50 hours per year
[6] Waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.
[7] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
[8] 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 BB shows that the proposed project would create 2,809.23 $MTCO_2e$ per year. According to the SCAQMD interim threshold of significance detailed above in Section 8.5, a cumulative global climate change impact would occur if the GHG emissions created from the on-going operations would exceed 10,000 $MTCO_2e$ per year. It should also be noted, that the proposed warehouse will be required to meet the 2022 Title 24 Part 6 building standards that require all new structures to install enhanced insulation as well as require the installation of energy-efficient lighting and appliances and Section 19.69.030, Non-Residential Regulations of the City's Development Code details a number of sustainability measures that must be incorporated into all new non-residential projects in the City and include requiring bicycle parking, providing shade trees in parking lots, and utilization of high-efficiency lighting in parking lots. For these reasons, a less than significant generation of greenhouse gas emissions would occur from construction and operation of the proposed project.

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 City of Perris adopted the *City of Perris Climate Action Plan* (City's Climate Action Plan), on February 23, 2016, that was prepared in order to meet the requirements of AB 32 and SB 375 and includes a GHG emissions inventory and details actions for the City to take to meet the GHG emissions reduction targets that the City committed to in the *Western Riverside Council of Governments Subregional Climate Action Plan,* prepared September 2014. In addition to the City's Climate Action Plan, the City also prepared a Conservation Element that is part of the City's General Plan, that provides goals and policies related to sustainability. The GHG reduction measures listed in both the City's Climate Action Plan and General Plan are limited to actions that the City will take to reduce GHG emissions created by activities within the City. The applicability of these plans to private development within the City is limited to the GHG reduction measures that are adopted in the City's Development Code. The applicable Section of the Development Code to the proposed project is Section 19.69.030, Non-Residential Regulations, which details a number of sustainability measures that must be incorporated into all new non-residential projects in the City and include requiring bicycle parking, providing shade trees in parking lots, and utilization of high-efficiency lighting in parking lots. Through implementation of the sustainability features that are required in Section 19.69.030 of the Municipal Code, the proposed project would not conflict with the applicable plans for reducing GHG emissions. Impacts would be less than significant.

Level of Significance

Less than significant impact.

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APPENDIX A

CalEEMod Model Printouts

945-995 W. Markham St Industrial Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	945-995 W. Markham St Industrial
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	9.00
Location	33.85164235406157, -117.24685818645932
County	Riverside-South Coast
City	Perris
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5580
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

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
Unrefrigerated Warehouse-No Rail	89.0	1000sqft	2.38	89,000	17,691	—	—	—
Parking Lot	1.68	Acre	1.68	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes

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.	48.3	20.9	29.7	0.04	0.90	0.97	1.87	0.82	0.23	1.05	5,268	0.21	0.13	4.98	5,318
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.99	24.4	29.6	0.05	0.94	5.39	6.33	0.84	2.69	3.54	5,720	0.23	0.41	0.16	5,750
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.75	8.33	11.3	0.02	0.34	0.40	0.74	0.31	0.10	0.41	2,203	0.09	0.07	0.96	2,227
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.50	1.52	2.05	< 0.005	0.06	0.07	0.14	0.06	0.02	0.07	365	0.01	0.01	0.16	369
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—
Unmit.	No	No	No	No	Yes	—	No	—	—	No	—	—	—	—	—

Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—
Unmit.	No	No	No	No	Yes	—	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	48.3	20.9	29.7	0.04	0.90	0.97	1.87	0.82	0.23	1.05	5,268	0.21	0.13	4.98	5,318
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.99	24.4	29.6	0.05	0.94	5.39	6.33	0.84	2.69	3.54	5,720	0.23	0.41	0.16	5,750
2024	0.63	12.6	16.8	0.03	0.51	0.61	1.12	0.46	0.15	0.61	3,345	0.13	0.11	0.09	3,380
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.07	1.73	1.91	< 0.005	0.07	0.19	0.27	0.06	0.07	0.14	457	0.02	0.02	0.14	464
2024	2.75	8.33	11.3	0.02	0.34	0.40	0.74	0.31	0.10	0.41	2,203	0.09	0.07	0.96	2,227
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.01	0.32	0.35	< 0.005	0.01	0.04	0.05	0.01	0.01	0.03	75.6	< 0.005	< 0.005	0.02	76.8
2024	0.50	1.52	2.05	< 0.005	0.06	0.07	0.14	0.06	0.02	0.07	365	0.01	0.01	0.16	369

2.3. Construction Emissions by Year, Mitigated

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	48.3	20.9	29.7	0.04	0.90	0.97	1.87	0.82	0.23	1.05	5,268	0.21	0.13	4.98	5,318
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.99	24.4	29.6	0.05	0.94	5.39	6.33	0.84	2.69	3.54	5,720	0.23	0.41	0.16	5,750
2024	0.63	12.6	16.8	0.03	0.51	0.61	1.12	0.46	0.15	0.61	3,345	0.13	0.11	0.09	3,380
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.07	1.73	1.91	< 0.005	0.07	0.19	0.27	0.06	0.07	0.14	457	0.02	0.02	0.14	464
2024	2.75	8.33	11.3	0.02	0.34	0.40	0.74	0.31	0.10	0.41	2,203	0.09	0.07	0.96	2,227
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.01	0.32	0.35	< 0.005	0.01	0.04	0.05	0.01	0.01	0.03	75.6	< 0.005	< 0.005	0.02	76.8
2024	0.50	1.52	2.05	< 0.005	0.06	0.07	0.14	0.06	0.02	0.07	365	0.01	0.01	0.16	369

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.	3.49	14.6	25.4	0.12	0.27	1.93	2.20	0.26	0.44	0.70	13,955	8.86	1.86	2,407	17,140
Mit.	3.49	14.6	25.4	0.12	0.27	1.93	2.20	0.26	0.44	0.70	13,932	8.50	1.86	2,407	17,105
% Reduced	—	—	—	—	—	—	—	—	—	—	< 0.5%	4%	< 0.5%	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.84	15.1	21.1	0.12	0.26	1.93	2.19	0.25	0.44	0.69	13,903	8.86	1.86	2,373	17,053

Mit.	2.84	15.1	21.1	0.12	0.26	1.93	2.19	0.25	0.44	0.69	13,881	8.50	1.86	2,373	17,019
% Reduced	—	—	—	—	—	—	—	—	—	—	< 0.5%	4%	< 0.5%	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.13	14.5	19.0	0.11	0.25	1.93	2.18	0.24	0.44	0.68	13,748	8.86	1.86	2,387	16,913
Mit.	3.13	14.5	19.0	0.11	0.25	1.93	2.18	0.24	0.44	0.68	13,725	8.49	1.86	2,387	16,878
% Reduced	—	—	—	—	—	—	—	—	—	—	< 0.5%	4%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.57	2.64	3.47	0.02	0.04	0.35	0.40	0.04	0.08	0.12	2,276	1.47	0.31	395	2,800
Mit.	0.57	2.64	3.47	0.02	0.04	0.35	0.40	0.04	0.08	0.12	2,272	1.41	0.31	395	2,794
% Reduced	—	—	—	—	—	—	—	—	—	—	< 0.5%	4%	< 0.5%	—	< 0.5%
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—
Unmit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—
Mit.	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	—	—	—	—	—
Mit.	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,000
Unmit.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No
Mit.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	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	0.49	12.1	5.23	0.11	0.20	1.93	2.13	0.19	0.44	0.63	11,973	0.19	1.76	35.5	12,537
Area	2.78	0.03	3.87	< 0.005	0.01	—	0.01	0.01	—	0.01	15.9	< 0.005	< 0.005	—	16.4
Energy	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	1,235	0.09	0.01	—	1,239
Water	—	—	—	—	—	—	—	—	—	—	246	4.06	0.10	—	376
Waste	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Off-Road	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342
Stationary	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Total	3.49	14.6	25.4	0.12	0.27	1.93	2.20	0.26	0.44	0.70	13,955	8.86	1.86	2,407	17,140
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.48	12.6	4.81	0.11	0.20	1.93	2.13	0.19	0.44	0.63	11,937	0.19	1.76	0.92	12,467
Area	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	1,235	0.09	0.01	—	1,239
Water	—	—	—	—	—	—	—	—	—	—	246	4.06	0.10	—	376
Waste	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Off-Road	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342
Stationary	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Total	2.84	15.1	21.1	0.12	0.26	1.93	2.19	0.25	0.44	0.69	13,903	8.86	1.86	2,373	17,053
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.48	12.7	4.88	0.11	0.20	1.93	2.13	0.19	0.44	0.63	11,941	0.20	1.76	15.3	12,486
Area	2.58	0.02	2.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.9	< 0.005	< 0.005	—	11.2
Energy	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	1,235	0.09	0.01	—	1,239
Water	—	—	—	—	—	—	—	—	—	—	246	4.06	0.10	—	376
Waste	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Off-Road	0.00	1.10	11.0	0.00	0.00	—	0.00	0.00	—	0.00	243	< 0.005	< 0.005	—	244
Stationary	0.05	0.15	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	27.1	< 0.005	< 0.005	—	27.2
Total	3.13	14.5	19.0	0.11	0.25	1.93	2.18	0.24	0.44	0.68	13,748	8.86	1.86	2,387	16,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.09	2.33	0.89	0.02	0.04	0.35	0.39	0.03	0.08	0.11	1,977	0.03	0.29	2.53	2,067
Area	0.47	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.80	< 0.005	< 0.005	—	1.86
Energy	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	204	0.02	< 0.005	—	205
Water	—	—	—	—	—	—	—	—	—	—	40.7	0.67	0.02	—	62.3
Waste	—	—	—	—	—	—	—	—	—	—	7.46	0.75	0.00	—	26.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	393	393
Off-Road	0.00	0.20	2.00	0.00	0.00	—	0.00	0.00	—	0.00	40.3	< 0.005	< 0.005	—	40.3
Stationary	0.01	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.49	< 0.005	< 0.005	—	4.51
Total	0.57	2.64	3.47	0.02	0.04	0.35	0.40	0.04	0.08	0.12	2,276	1.47	0.31	395	2,800

2.6. Operations Emissions by Sector, Mitigated

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	0.49	12.1	5.23	0.11	0.20	1.93	2.13	0.19	0.44	0.63	11,973	0.19	1.76	35.5	12,537
Area	2.78	0.03	3.87	< 0.005	0.01	—	0.01	0.01	—	0.01	15.9	< 0.005	< 0.005	—	16.4

Energy	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	1,235	0.09	0.01	—	1,239
Water	—	—	—	—	—	—	—	—	—	—	223	3.70	0.09	—	342
Waste	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Off-Road	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342
Stationary	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Total	3.49	14.6	25.4	0.12	0.27	1.93	2.20	0.26	0.44	0.70	13,932	8.50	1.86	2,407	17,105
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.48	12.6	4.81	0.11	0.20	1.93	2.13	0.19	0.44	0.63	11,937	0.19	1.76	0.92	12,467
Area	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	1,235	0.09	0.01	—	1,239
Water	—	—	—	—	—	—	—	—	—	—	223	3.70	0.09	—	342
Waste	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Off-Road	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342
Stationary	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Total	2.84	15.1	21.1	0.12	0.26	1.93	2.19	0.25	0.44	0.69	13,881	8.50	1.86	2,373	17,019
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.48	12.7	4.88	0.11	0.20	1.93	2.13	0.19	0.44	0.63	11,941	0.20	1.76	15.3	12,486
Area	2.58	0.02	2.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.9	< 0.005	< 0.005	—	11.2
Energy	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	1,235	0.09	0.01	—	1,239
Water	—	—	—	—	—	—	—	—	—	—	223	3.70	0.09	—	342
Waste	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Off-Road	0.00	1.10	11.0	0.00	0.00	—	0.00	0.00	—	0.00	243	< 0.005	< 0.005	—	244
Stationary	0.05	0.15	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	27.1	< 0.005	< 0.005	—	27.2

Total	3.13	14.5	19.0	0.11	0.25	1.93	2.18	0.24	0.44	0.68	13,725	8.49	1.86	2,387	16,878
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.09	2.33	0.89	0.02	0.04	0.35	0.39	0.03	0.08	0.11	1,977	0.03	0.29	2.53	2,067
Area	0.47	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.80	< 0.005	< 0.005	—	1.86
Energy	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	204	0.02	< 0.005	—	205
Water	—	—	—	—	—	—	—	—	—	—	36.9	0.61	0.01	—	56.6
Waste	—	—	—	—	—	—	—	—	—	—	7.46	0.75	0.00	—	26.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	393	393
Off-Road	0.00	0.20	2.00	0.00	0.00	—	0.00	0.00	—	0.00	40.3	< 0.005	< 0.005	—	40.3
Stationary	0.01	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.49	< 0.005	< 0.005	—	4.51
Total	0.57	2.64	3.47	0.02	0.04	0.35	0.40	0.04	0.08	0.12	2,272	1.41	0.31	395	2,794

3. Construction Emissions Details

3.1. Demolition (2023) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	17.3	18.2	0.03	0.79	—	0.79	0.71	—	0.71	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	0.67	0.67	—	0.10	0.10	—	—	—	—	—
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.95	1.00	< 0.005	0.04	—	0.04	0.04	—	0.04	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	0.04	0.04	—	0.01	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.17	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.03	0.00	0.00	0.20	0.20	0.00	0.05	0.05	202	0.01	0.01	0.02	205
Vendor	0.01	0.23	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	189	< 0.005	0.03	0.01	197
Hauling	0.01	1.03	0.24	0.01	0.02	0.22	0.24	0.02	0.06	0.08	860	0.02	0.14	0.05	901
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	11.2	< 0.005	< 0.005	0.02	11.4
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.3	< 0.005	< 0.005	0.01	10.8
Hauling	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	47.1	< 0.005	0.01	0.04	49.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.86	< 0.005	< 0.005	< 0.005	1.89
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.71	< 0.005	< 0.005	< 0.005	1.79

Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.80	< 0.005	< 0.005	0.01	8.18

3.2. Demolition (2023) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	17.3	18.2	0.03	0.79	—	0.79	0.71	—	0.71	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	0.67	0.67	—	0.10	0.10	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.95	1.00	< 0.005	0.04	—	0.04	0.04	—	0.04	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	0.04	0.04	—	0.01	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.17	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.03	0.00	0.00	0.20	0.20	0.00	0.05	0.05	202	0.01	0.01	0.02	205
Vendor	0.01	0.23	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	189	< 0.005	0.03	0.01	197
Hauling	0.01	1.03	0.24	0.01	0.02	0.22	0.24	0.02	0.06	0.08	860	0.02	0.14	0.05	901
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	11.2	< 0.005	< 0.005	0.02	11.4
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.3	< 0.005	< 0.005	0.01	10.8
Hauling	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	47.1	< 0.005	0.01	0.04	49.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.86	< 0.005	< 0.005	< 0.005	1.89
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.80	< 0.005	< 0.005	0.01	8.18

3.3. Site Preparation (2023) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	24.0	28.3	0.05	0.94	—	0.94	0.84	—	0.84	5,295	0.21	0.04	—	5,314

Dust From Material Movement	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—
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	0.01	0.33	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	0.07	0.07	—	0.04	0.04	—	—	—	—	—
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	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.20	0.00	0.00	0.23	0.23	0.00	0.05	0.05	236	0.01	0.01	0.03	239
Vendor	0.01	0.23	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	189	< 0.005	0.03	0.01	197
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.28	< 0.005	< 0.005	0.01	3.32
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.58	< 0.005	< 0.005	< 0.005	2.70
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	0.54	< 0.005	< 0.005	< 0.005	0.55
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.43	< 0.005	< 0.005	< 0.005	0.45
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

3.4. Site Preparation (2023) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	24.0	28.3	0.05	0.94	—	0.94	0.84	—	0.84	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—	—	—	—	—
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	0.01	0.33	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	0.07	0.07	—	0.04	0.04	—	—	—	—	—

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	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.20	0.00	0.00	0.23	0.23	0.00	0.05	0.05	236	0.01	0.01	0.03	239
Vendor	0.01	0.23	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	189	< 0.005	0.03	0.01	197
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.28	< 0.005	< 0.005	0.01	3.32
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.58	< 0.005	< 0.005	< 0.005	2.70
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	0.54	< 0.005	< 0.005	< 0.005	0.55
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.43	< 0.005	< 0.005	< 0.005	0.45
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 (2023) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	14.1	17.8	0.03	0.60	—	0.60	0.54	—	0.54	2,958	0.12	0.02	—	2,968
Dust From Material Movement	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—
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	0.01	0.31	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	64.8	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—
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	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.7	< 0.005	< 0.005	—	10.8
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.03	0.00	0.00	0.20	0.20	0.00	0.05	0.05	202	0.01	0.01	0.02	205
Vendor	0.01	0.23	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	189	< 0.005	0.03	0.01	197
Hauling	0.03	2.66	0.62	0.01	0.04	0.57	0.61	0.04	0.16	0.20	2,220	0.04	0.35	0.12	2,326
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.49	< 0.005	< 0.005	0.01	4.56
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.13	< 0.005	< 0.005	< 0.005	4.32
Hauling	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	48.6	< 0.005	0.01	0.04	51.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.74	< 0.005	< 0.005	< 0.005	0.75
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.68	< 0.005	< 0.005	< 0.005	0.72
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8.05	< 0.005	< 0.005	0.01	8.45

3.6. Grading (2023) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	14.1	17.8	0.03	0.60	—	0.60	0.54	—	0.54	2,958	0.12	0.02	—	2,968

Dust From Material Movement	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—
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	0.01	0.31	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	64.8	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—
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	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.7	< 0.005	< 0.005	—	10.8
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.03	0.00	0.00	0.20	0.20	0.00	0.05	0.05	202	0.01	0.01	0.02	205
Vendor	0.01	0.23	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	189	< 0.005	0.03	0.01	197
Hauling	0.03	2.66	0.62	0.01	0.04	0.57	0.61	0.04	0.16	0.20	2,220	0.04	0.35	0.12	2,326
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.49	< 0.005	< 0.005	0.01	4.56
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.13	< 0.005	< 0.005	< 0.005	4.32
Hauling	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	48.6	< 0.005	0.01	0.04	51.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.74	< 0.005	< 0.005	< 0.005	0.75
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.68	< 0.005	< 0.005	< 0.005	0.72
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8.05	< 0.005	< 0.005	0.01	8.45

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	0.44	11.8	14.3	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	0.44	11.8	14.3	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	0.27	7.45	9.01	0.01	0.32	—	0.32	0.29	—	0.29	1,511	0.06	0.01	—	1,516

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	0.05	1.36	1.64	< 0.005	0.06	—	0.06	0.05	—	0.05	250	0.01	< 0.005	—	251
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	0.19	0.18	3.12	0.00	0.00	0.49	0.49	0.00	0.11	0.11	538	0.02	0.02	2.13	546
Vendor	0.01	0.51	0.16	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	453	0.01	0.07	1.28	475
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	0.18	0.21	2.36	0.00	0.00	0.49	0.49	0.00	0.11	0.11	494	0.02	0.02	0.06	501
Vendor	0.01	0.54	0.16	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	453	0.01	0.07	0.03	474
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	0.11	0.13	1.57	0.00	0.00	0.31	0.31	0.00	0.07	0.07	316	0.01	0.01	0.58	320
Vendor	0.01	0.34	0.10	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	285	0.01	0.04	0.35	299
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	0.02	0.02	0.29	0.00	0.00	0.06	0.06	0.00	0.01	0.01	52.2	< 0.005	< 0.005	0.10	53.0
Vendor	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	47.3	< 0.005	0.01	0.06	49.5
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

3.8. Building Construction (2024) - Mitigated

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	0.44	11.8	14.3	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	0.44	11.8	14.3	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	0.27	7.45	9.01	0.01	0.32	—	0.32	0.29	—	0.29	1,511	0.06	0.01	—	1,516
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	0.05	1.36	1.64	< 0.005	0.06	—	0.06	0.05	—	0.05	250	0.01	< 0.005	—	251
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	0.19	0.18	3.12	0.00	0.00	0.49	0.49	0.00	0.11	0.11	538	0.02	0.02	2.13	546
Vendor	0.01	0.51	0.16	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	453	0.01	0.07	1.28	475
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	0.18	0.21	2.36	0.00	0.00	0.49	0.49	0.00	0.11	0.11	494	0.02	0.02	0.06	501
Vendor	0.01	0.54	0.16	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	453	0.01	0.07	0.03	474
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	0.11	0.13	1.57	0.00	0.00	0.31	0.31	0.00	0.07	0.07	316	0.01	0.01	0.58	320
Vendor	0.01	0.34	0.10	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	285	0.01	0.04	0.35	299
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	0.02	0.02	0.29	0.00	0.00	0.06	0.06	0.00	0.01	0.01	52.2	< 0.005	< 0.005	0.10	53.0
Vendor	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	47.3	< 0.005	0.01	0.06	49.5
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. Paving (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	0.26	7.14	8.87	0.01	0.32	—	0.32	0.29	—	0.29	1,351	0.05	0.01	—	1,355
Paving	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.35	0.44	< 0.005	0.02	—	0.02	0.01	—	0.01	66.6	< 0.005	< 0.005	—	66.8
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.0	< 0.005	< 0.005	—	11.1
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.10	0.10	1.67	0.00	0.00	0.26	0.26	0.00	0.06	0.06	288	0.01	0.01	1.14	292
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	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	13.2	< 0.005	< 0.005	0.02	13.4
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	2.19	< 0.005	< 0.005	< 0.005	2.22
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

3.10. Paving (2024) - Mitigated

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	0.26	7.14	8.87	0.01	0.32	—	0.32	0.29	—	0.29	1,351	0.05	0.01	—	1,355
Paving	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.35	0.44	< 0.005	0.02	—	0.02	0.01	—	0.01	66.6	< 0.005	< 0.005	—	66.8
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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.0	< 0.005	< 0.005	—	11.1
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.10	0.10	1.67	0.00	0.00	0.26	0.26	0.00	0.06	0.06	288	0.01	0.01	1.14	292
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	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	13.2	< 0.005	< 0.005	0.02	13.4
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	2.19	< 0.005	< 0.005	< 0.005	2.22
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

3.11. Architectural Coating (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	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	—	134
Architectural Coatings	47.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.58	< 0.005	< 0.005	—	6.61
Architectural Coatings	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	1.09	< 0.005	< 0.005	—	1.09
Architectural Coatings	0.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.04	0.04	0.62	0.00	0.00	0.10	0.10	0.00	0.02	0.02	108	< 0.005	< 0.005	0.43	109

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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.94	< 0.005	< 0.005	0.01	5.01
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.82	< 0.005	< 0.005	< 0.005	0.83
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

3.12. Architectural Coating (2024) - Mitigated

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	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	—	134
Architectural Coatings	47.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.58	< 0.005	< 0.005	—	6.61
Architectural Coatings	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	1.09	< 0.005	< 0.005	—	1.09
Architectural Coatings	0.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.04	0.04	0.62	0.00	0.00	0.10	0.10	0.00	0.02	0.02	108	< 0.005	< 0.005	0.43	109
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.94	< 0.005	< 0.005	0.01	5.01

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.82	< 0.005	< 0.005	< 0.005	0.83
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.22	0.13	2.49	< 0.005	< 0.005	0.18	0.18	< 0.005	0.03	0.03	493	0.02	0.01	1.97	499
Parking Lot	0.27	11.9	2.75	0.11	0.20	1.76	1.95	0.19	0.41	0.60	11,480	0.18	1.74	33.5	12,038
Total	0.49	12.1	5.23	0.11	0.20	1.93	2.13	0.19	0.44	0.63	11,973	0.19	1.76	35.5	12,537
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.21	0.14	2.05	< 0.005	< 0.005	0.18	0.18	< 0.005	0.03	0.03	455	0.02	0.01	0.05	459

Parking Lot	0.27	12.5	2.76	0.11	0.20	1.76	1.95	0.19	0.41	0.60	11,482	0.17	1.75	0.87	12,008
Total	0.48	12.6	4.81	0.11	0.20	1.93	2.13	0.19	0.44	0.63	11,937	0.19	1.76	0.92	12,467
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.04	0.03	0.39	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	76.2	< 0.005	< 0.005	0.14	77.1
Parking Lot	0.05	2.30	0.50	0.02	0.04	0.32	0.36	0.03	0.07	0.11	1,901	0.03	0.29	2.39	1,990
Total	0.09	2.33	0.89	0.02	0.04	0.35	0.39	0.03	0.08	0.11	1,977	0.03	0.29	2.53	2,067

4.1.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.22	0.13	2.49	< 0.005	< 0.005	0.18	0.18	< 0.005	0.03	0.03	493	0.02	0.01	1.97	499
Parking Lot	0.27	11.9	2.75	0.11	0.20	1.76	1.95	0.19	0.41	0.60	11,480	0.18	1.74	33.5	12,038
Total	0.49	12.1	5.23	0.11	0.20	1.93	2.13	0.19	0.44	0.63	11,973	0.19	1.76	35.5	12,537
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.21	0.14	2.05	< 0.005	< 0.005	0.18	0.18	< 0.005	0.03	0.03	455	0.02	0.01	0.05	459
Parking Lot	0.27	12.5	2.76	0.11	0.20	1.76	1.95	0.19	0.41	0.60	11,482	0.17	1.75	0.87	12,008

Total	0.48	12.6	4.81	0.11	0.20	1.93	2.13	0.19	0.44	0.63	11,937	0.19	1.76	0.92	12,467
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.04	0.03	0.39	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	76.2	< 0.005	< 0.005	0.14	77.1
Parking Lot	0.05	2.30	0.50	0.02	0.04	0.32	0.36	0.03	0.07	0.11	1,901	0.03	0.29	2.39	1,990
Total	0.09	2.33	0.89	0.02	0.04	0.35	0.39	0.03	0.08	0.11	1,977	0.03	0.29	2.53	2,067

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	597	0.04	< 0.005	—	599
Parking Lot	—	—	—	—	—	—	—	—	—	—	93.4	0.01	< 0.005	—	93.8
Total	—	—	—	—	—	—	—	—	—	—	690	0.04	0.01	—	693
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	597	0.04	< 0.005	—	599

Parking Lot	—	—	—	—	—	—	—	—	—	—	93.4	0.01	< 0.005	—	93.8
Total	—	—	—	—	—	—	—	—	—	—	690	0.04	0.01	—	693
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	98.8	0.01	< 0.005	—	99.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	15.5	< 0.005	< 0.005	—	15.5
Total	—	—	—	—	—	—	—	—	—	—	114	0.01	< 0.005	—	115

4.2.2. Electricity Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	597	0.04	< 0.005	—	599
Parking Lot	—	—	—	—	—	—	—	—	—	—	93.4	0.01	< 0.005	—	93.8
Total	—	—	—	—	—	—	—	—	—	—	690	0.04	0.01	—	693
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	597	0.04	< 0.005	—	599
Parking Lot	—	—	—	—	—	—	—	—	—	—	93.4	0.01	< 0.005	—	93.8

Total	—	—	—	—	—	—	—	—	—	—	690	0.04	0.01	—	693
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	98.8	0.01	< 0.005	—	99.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	15.5	< 0.005	< 0.005	—	15.5
Total	—	—	—	—	—	—	—	—	—	—	114	0.01	< 0.005	—	115

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	545	0.05	< 0.005	—	546
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	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	545	0.05	< 0.005	—	546
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	545	0.05	< 0.005	—	546
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	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	545	0.05	< 0.005	—	546

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	90.2	0.01	< 0.005	—	90.4
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	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	90.2	0.01	< 0.005	—	90.4

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	545	0.05	< 0.005	—	546
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	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	545	0.05	< 0.005	—	546
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	545	0.05	< 0.005	—	546
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	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	545	0.05	< 0.005	—	546
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigera Warehouse-No Rail	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	90.2	0.01	< 0.005	—	90.4
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	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	90.2	0.01	< 0.005	—	90.4

4.3. Area Emissions by Source

4.3.2. 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	1.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.63	0.03	3.87	< 0.005	0.01	—	0.01	0.01	—	0.01	15.9	< 0.005	< 0.005	—	16.4
Total	2.78	0.03	3.87	< 0.005	0.01	—	0.01	0.01	—	0.01	15.9	< 0.005	< 0.005	—	16.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Products	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.08	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.80	< 0.005	< 0.005	—	1.86
Total	0.47	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.80	< 0.005	< 0.005	—	1.86

4.3.1. Mitigated

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	1.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.63	0.03	3.87	< 0.005	0.01	—	0.01	0.01	—	0.01	15.9	< 0.005	< 0.005	—	16.4
Total	2.78	0.03	3.87	< 0.005	0.01	—	0.01	0.01	—	0.01	15.9	< 0.005	< 0.005	—	16.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Products	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.08	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.80	< 0.005	< 0.005	—	1.86
Total	0.47	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.80	< 0.005	< 0.005	—	1.86

4.4. Water Emissions by Land Use

4.4.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	246	4.06	0.10	—	376
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	246	4.06	0.10	—	376
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	246	4.06	0.10	—	376
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	246	4.06	0.10	—	376
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	40.7	0.67	0.02	—	62.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	40.7	0.67	0.02	—	62.3

4.4.1. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	223	3.70	0.09	—	342
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	223	3.70	0.09	—	342
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	223	3.70	0.09	—	342
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	223	3.70	0.09	—	342

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	36.9	0.61	0.01	—	56.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	36.9	0.61	0.01	—	56.6

4.5. Waste Emissions by Land Use

4.5.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	7.46	0.75	0.00	—	26.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	7.46	0.75	0.00	—	26.1

4.5.1. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	45.1	4.51	0.00	—	158

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	7.46	0.75	0.00	—	26.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	7.46	0.75	0.00	—	26.1

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigera Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	393	393
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	393	393

4.6.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	2,372	2,372
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	393	393
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	393	393

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342
Total	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342
Total	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.20	2.00	0.00	0.00	—	0.00	0.00	—	0.00	40.3	< 0.005	< 0.005	—	40.3
Total	0.00	0.20	2.00	0.00	0.00	—	0.00	0.00	—	0.00	40.3	< 0.005	< 0.005	—	40.3

4.7.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342
Total	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342
Total	0.00	1.54	15.4	0.00	0.00	—	0.00	0.00	—	0.00	342	0.01	< 0.005	—	342
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.00	0.20	2.00	0.00	0.00	—	0.00	0.00	—	0.00	40.3	< 0.005	< 0.005	—	40.3
Total	0.00	0.20	2.00	0.00	0.00	—	0.00	0.00	—	0.00	40.3	< 0.005	< 0.005	—	40.3

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Total	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Total	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.01	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.49	< 0.005	< 0.005	—	4.51
Total	0.01	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.49	< 0.005	< 0.005	—	4.51

4.8.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Total	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Total	0.19	0.54	0.49	< 0.005	0.03	—	0.03	0.03	—	0.03	99.1	< 0.005	< 0.005	—	99.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.01	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.49	< 0.005	< 0.005	—	4.51
Total	0.01	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.49	< 0.005	< 0.005	—	4.51

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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	11/14/2023	12/9/2023	5.00	20.0	—
Site Preparation	Site Preparation	12/12/2023	12/16/2023	5.00	5.00	—
Grading	Grading	12/19/2023	12/30/2023	5.00	8.00	—
Building Construction	Building Construction	1/1/2024	9/14/2024	5.00	230	—
Paving	Paving	8/22/2024	9/14/2024	5.00	18.0	—
Architectural Coating	Architectural Coating	8/22/2024	9/14/2024	5.00	18.0	—

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	Tier 3	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Tier 3	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 3	3.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Tier 3	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 3	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 3	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 3	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 3	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Tier 3	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 3	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 3	1.00	8.00	14.0	0.74

Building Construction	Welders	Diesel	Tier 3	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 3	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Tier 3	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 3	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 3	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Tier 3	2.00	6.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 3	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 3	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Tier 3	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 3	3.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Tier 3	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 3	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 3	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 3	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 3	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Tier 3	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 3	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 3	1.00	8.00	14.0	0.74

Building Construction	Welders	Diesel	Tier 3	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 3	3.00	7.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Tier 3	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 3	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 3	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Tier 3	2.00	6.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 3	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	6.00	10.2	HHDT,MHDT
Demolition	Hauling	12.1	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2

Grading	Vendor	6.00	10.2	HHDT,MHDT
Grading	Hauling	31.3	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	37.4	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	14.6	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	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	7.48	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

5.3.2. Mitigated

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	6.00	10.2	HHDT,MHDT
Demolition	Hauling	12.1	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—

Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	6.00	10.2	HHDT,MHDT
Grading	Hauling	31.3	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	37.4	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	14.6	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	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	7.48	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	133,500	44,500	4,391

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	967	—
Site Preparation	—	—	7.50	0.00	—
Grading	2,000	—	8.00	0.00	—
Paving	0.00	0.00	0.00	0.00	1.68

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
Unrefrigerated Warehouse-No Rail	0.00	0%
Parking Lot	1.68	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	349	0.03	< 0.005
2024	0.00	349	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
Unrefrigerated Warehouse-No Rail	53.4	53.4	53.4	19,491	663	663	663	241,833
Parking Lot	99.0	99.0	99.0	36,136	3,960	3,960	3,960	1,445,435

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	53.4	53.4	53.4	19,491	663	663	663	241,833
Parking Lot	99.0	99.0	99.0	36,136	3,960	3,960	3,960	1,445,435

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

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	133,500	44,500	4,391

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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)
Unrefrigerated Warehouse-No Rail	409,609	532	0.0330	0.0040	1,699,204
Parking Lot	64,106	532	0.0330	0.0040	0.00

5.11.2. Mitigated

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)

Unrefrigerated Warehouse-No Rail	409,609	532	0.0330	0.0040	1,699,204
Parking Lot	64,106	532	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)
Unrefrigerated Warehouse-No Rail	20,581,250	280,503
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	18,749,519	115,009
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	83.7	0.00
Parking Lot	0.00	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	83.7	0.00
Parking Lot	0.00	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
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

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
Forklifts	CNG	Average	2.00	7.00	82.0	0.20

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	CNG	Average	2.00	7.00	82.0	0.20

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
Fire Pump	Diesel	1.00	0.50	50.0	236	0.73

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

5.18.1.2. Mitigated

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

5.18.1.2. Mitigated

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)

5.18.2.2. Mitigated

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	29.1	annual days of extreme heat
Extreme Precipitation	1.95	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	6.36	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
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	4	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	4	1	1	4
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	97.6
AQ-PM	53.3
AQ-DPM	47.8
Drinking Water	10.2
Lead Risk Housing	22.0
Pesticides	58.8
Toxic Releases	37.7
Traffic	81.9
Effect Indicators	—
CleanUp Sites	69.4
Groundwater	0.00
Haz Waste Facilities/Generators	53.5
Impaired Water Bodies	0.00
Solid Waste	40.1
Sensitive Population	—
Asthma	65.6
Cardio-vascular	90.6

Low Birth Weights	62.9
Socioeconomic Factor Indicators	—
Education	74.7
Housing	57.9
Linguistic	53.4
Poverty	64.5
Unemployment	15.8

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	36.04516874
Employed	38.00846914
Median HI	53.00911074
Education	—
Bachelor's or higher	28.6154241
High school enrollment	100
Preschool enrollment	5.440780187
Transportation	—
Auto Access	94.58488387
Active commuting	6.723983062
Social	—
2-parent households	87.71974849
Voting	9.636853587
Neighborhood	—
Alcohol availability	84.04978827

Park access	11.88245862
Retail density	29.21852945
Supermarket access	12.06210702
Tree canopy	0.590273322
Housing	—
Homeownership	79.23777749
Housing habitability	40.67753112
Low-inc homeowner severe housing cost burden	12.19042731
Low-inc renter severe housing cost burden	27.61452586
Uncrowded housing	47.8121391
Health Outcomes	—
Insured adults	26.49813936
Arthritis	79.8
Asthma ER Admissions	42.9
High Blood Pressure	64.8
Cancer (excluding skin)	87.6
Asthma	27.9
Coronary Heart Disease	81.5
Chronic Obstructive Pulmonary Disease	59.8
Diagnosed Diabetes	52.6
Life Expectancy at Birth	37.8
Cognitively Disabled	88.7
Physically Disabled	83.0
Heart Attack ER Admissions	7.5
Mental Health Not Good	28.5
Chronic Kidney Disease	64.9
Obesity	17.5

Pedestrian Injuries	92.5
Physical Health Not Good	37.9
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	30.9
Current Smoker	25.4
No Leisure Time for Physical Activity	29.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	35.2
Elderly	90.4
English Speaking	42.3
Foreign-born	59.5
Outdoor Workers	11.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	72.4
Traffic Density	65.3
Traffic Access	23.0
Other Indices	—
Hardship	70.6
Other Decision Support	—
2016 Voting	23.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	69.0

Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
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 = 4.06 acres
Construction: Construction Phases	Construction schedule provided by applicant
Construction: Off-Road Equipment	All Equipment set to Tier 3 to account for MM Air-6
Operations: Vehicle Data	Auto trips analyzed under Warehouse and Truck trips analyzed under Parking Lot
Operations: Fleet Mix	Auto trips analyzed under Warehouse and Truck trips analyzed under parking lot
Operations: Off-Road Equipment	2 forklifts operating 7 hours per day CNG

APPENDIX B

EMFAC2017 Model Printouts

EMFAC2017 version 1.0.3

calendar year	Season Month	Sub_Area	Vehicle Class	Fuel	Temp-erature	Relativ Humidi	Process	Speed Time	Pollutant	Emission Rate
2023	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.025935
2023	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.009839
2023	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.01261
2023	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.006197
2023	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.00138
2023	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.001304
2023	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004867
2023	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2023	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2023	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.05206
2023	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.019481
2023	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.019386
2023	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004836
2023	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001091
2023	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001054
2023	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.009843
2023	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007436
2023	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029623
2023	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.072524
2023	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008584
2023	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.081088
2023	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2023	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2023	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2023	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037065
2023	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029431
2023	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080533
2023	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.786519
2023	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2023	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080009
2023	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2023	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078091
2023	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.013924
2023	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029331
2023	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.080802
2024	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.022712
2024	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.008748
2024	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.011282
2024	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.005943
2024	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.001321
2024	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.001248
2024	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004867
2024	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2024	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2024	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.048962
2024	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.018587

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2024	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.018232
2024	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004805
2024	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001081
2024	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001042
2024	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.00982
2024	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007528
2024	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.030214
2024	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.066626
2024	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008562
2024	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.08016
2024	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2024	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2024	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2024	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037061
2024	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029431
2024	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080533
2024	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.78627
2024	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2024	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080016
2024	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2024	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078104
2024	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.013437
2024	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029382
2024	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.080656
2025	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.020358
2025	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.007942
2025	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.010275
2025	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.005725
2025	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.001271
2025	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.001201
2025	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004867
2025	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2025	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2025	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.045982
2025	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.017716
2025	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.017122
2025	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004793
2025	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001076
2025	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001035
2025	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.009724
2025	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007546
2025	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.030486
2025	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.061253
2025	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008544
2025	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.079493
2025	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008

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2025	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2025	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2025	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037058
2025	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029431
2025	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080533
2025	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.786597
2025	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2025	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080022
2025	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2025	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078115
2025	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.012995
2025	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029438
2025	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.080497
2026	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.018096
2026	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.007174
2026	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.009325
2026	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.00549
2026	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.001218
2026	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.001151
2026	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004867
2026	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2026	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2026	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.043095
2026	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.016862
2026	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.016047
2026	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004787
2026	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001071
2026	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001029
2026	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.009587
2026	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007522
2026	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.030571
2026	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.056555
2026	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.00853
2026	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.079129
2026	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2026	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2026	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2026	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037056
2026	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029431
2026	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080534
2026	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.787208
2026	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2026	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080029
2026	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2026	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078124
2026	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.012551

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2026	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029495
2026	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.080334
2027	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.016002
2027	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.006468
2027	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.008452
2027	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.005217
2027	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.001156
2027	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.001094
2027	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004867
2027	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2027	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2027	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.040336
2027	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.016036
2027	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.015019
2027	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004801
2027	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001072
2027	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001029
2027	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.009451
2027	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007485
2027	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.030575
2027	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.052196
2027	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008519
2027	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.078837
2027	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2027	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2027	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2027	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037054
2027	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029431
2027	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080534
2027	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.787424
2027	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2027	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080034
2027	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2027	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.07813
2027	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.012181
2027	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029547
2027	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.080185
2028	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.01429
2028	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.005892
2028	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.007744
2028	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.004911
2028	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.001088
2028	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.001029
2028	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2028	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2028	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684

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2028	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.037753
2028	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.015254
2028	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.014057
2028	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.00482
2028	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001074
2028	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001029
2028	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.009329
2028	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007446
2028	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.030542
2028	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.048048
2028	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008508
2028	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.078624
2028	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2028	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2028	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2028	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037052
2028	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2028	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2028	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.788112
2028	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2028	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.08004
2028	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2028	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078135
2028	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.011899
2028	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029598
2028	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.080039
2029	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.012844
2029	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.005414
2029	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.007161
2029	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.004616
2029	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.001022
2029	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000967
2029	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2029	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2029	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2029	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.03534
2029	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.014513
2029	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.013159
2029	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004833
2029	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001074
2029	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001027
2029	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.009193
2029	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007391
2029	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.030448
2029	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.043915
2029	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008499

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2029	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.078466
2029	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2029	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2029	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2029	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037049
2029	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2029	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2029	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.788381
2029	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2029	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080045
2029	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2029	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078139
2029	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.011608
2029	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029647
2029	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.0799
2030	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.011492
2030	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.004976
2030	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.006634
2030	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.004339
2030	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.00096
2030	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000909
2030	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2030	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2030	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2030	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.033109
2030	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.01382
2030	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.012328
2030	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004843
2030	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001073
2030	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001023
2030	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.009061
2030	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007335
2030	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.030341
2030	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.039752
2030	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008491
2030	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.078331
2030	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2030	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2030	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2030	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037047
2030	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2030	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2030	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.788658
2030	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2030	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080049
2030	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008

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2030	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078142
2030	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.011321
2030	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029693
2030	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.079768
2031	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.010393
2031	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.004623
2031	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.006208
2031	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.004081
2031	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000902
2031	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000855
2031	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2031	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2031	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2031	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.031056
2031	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.013173
2031	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.011564
2031	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004844
2031	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001069
2031	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001017
2031	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008946
2031	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007286
2031	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.030248
2031	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.035573
2031	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008484
2031	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.078183
2031	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2031	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2031	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2031	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037045
2031	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2031	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2031	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.788176
2031	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2031	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080053
2031	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2031	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078143
2031	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.011093
2031	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029733
2031	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.079652
2032	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.009332
2032	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.004279
2032	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.005792
2032	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.003843
2032	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000849
2032	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000805
2032	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866

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2032	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2032	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2032	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.029261
2032	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.012598
2032	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.010895
2032	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004853
2032	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001068
2032	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001014
2032	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008839
2032	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007239
2032	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.030153
2032	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.031445
2032	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008478
2032	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.07803
2032	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2032	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2032	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2032	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037042
2032	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2032	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2032	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.789098
2032	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2032	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080055
2032	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2032	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078143
2032	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010924
2032	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029771
2032	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.079546
2033	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.008422
2033	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.003979
2033	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.005422
2033	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.003623
2033	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.0008
2033	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000759
2033	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2033	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2033	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2033	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.027626
2033	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.012068
2033	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.010286
2033	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004852
2033	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001068
2033	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001014
2033	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008733
2033	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007191
2033	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.030059

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2033	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.027389
2033	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008472
2033	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.077854
2033	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2033	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2033	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2033	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037038
2033	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2033	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2033	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.789747
2033	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2033	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080057
2033	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2033	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078142
2033	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010755
2033	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029806
2033	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.079445
2034	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.007593
2034	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.00369
2034	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.00506
2034	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.003422
2034	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000755
2034	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000717
2034	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2034	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2034	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2034	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.026143
2034	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.011578
2034	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.009734
2034	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004825
2034	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001062
2034	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001008
2034	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008611
2034	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007132
2034	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029927
2034	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.0235
2034	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008467
2034	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.077691
2034	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2034	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2034	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2034	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037034
2034	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2034	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2034	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.789694
2034	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012

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2034	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080058
2034	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2034	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078142
2034	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010575
2034	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029838
2034	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.079352
2035	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.006868
2035	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.003419
2035	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.004716
2035	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.003238
2035	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000714
2035	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000678
2035	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2035	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2035	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2035	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.024729
2035	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.011109
2035	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.009207
2035	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004806
2035	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001057
2035	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001005
2035	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008514
2035	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007083
2035	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029796
2035	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.019903
2035	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008463
2035	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.077546
2035	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2035	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2035	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007988
2035	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037029
2035	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2035	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2035	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.789582
2035	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2035	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080059
2035	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2035	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078141
2035	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010443
2035	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.02987
2035	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.079262
2036	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.006246
2036	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.003173
2036	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.004396
2036	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.003077
2036	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000679

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2036	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000645
2036	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2036	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2036	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2036	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.02355
2036	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.010712
2036	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.008768
2036	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004815
2036	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001059
2036	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001006
2036	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008448
2036	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007053
2036	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029702
2036	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.016723
2036	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008459
2036	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.07741
2036	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2036	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2036	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2036	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037023
2036	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2036	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2036	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.790304
2036	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2036	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.08006
2036	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2036	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.07814
2036	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010358
2036	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.0299
2036	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.079176
2037	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.005691
2037	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.002944
2037	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.004096
2037	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002934
2037	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000647
2037	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000615
2037	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2037	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2037	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2037	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.022447
2037	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.010339
2037	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.008358
2037	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004824
2037	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001061
2037	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001008
2037	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.0084

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2037	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007031
2037	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029632
2037	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.014018
2037	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008455
2037	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.077315
2037	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2037	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2037	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2037	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037015
2037	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2037	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2037	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.791078
2037	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2037	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080062
2037	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2037	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078139
2037	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010298
2037	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029929
2037	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.079094
2038	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.005225
2038	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.002743
2038	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.003834
2038	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002806
2038	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000619
2038	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000588
2038	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2038	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2038	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2038	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.021472
2038	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.010003
2038	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.007995
2038	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.00483
2038	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001063
2038	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001009
2038	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008366
2038	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007016
2038	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029587
2038	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.011845
2038	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008452
2038	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.077257
2038	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2038	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2038	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2038	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.037004
2038	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2038	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557

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2038	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.791637
2038	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2038	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080063
2038	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2038	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078138
2038	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.01025
2038	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029956
2038	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.079015
2039	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.004849
2039	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.002571
2039	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.003611
2039	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002694
2039	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000594
2039	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000564
2039	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2039	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2039	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2039	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.0206
2039	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.009702
2039	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.00767
2039	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004832
2039	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001063
2039	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.00101
2039	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008337
2039	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007006
2039	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029564
2039	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.010219
2039	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008449
2039	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.077256
2039	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2039	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2039	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2039	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036991
2039	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2039	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2039	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.792493
2039	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2039	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080063
2039	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2039	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078137
2039	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.0102
2039	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.029983
2039	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078938
2040	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.00453
2040	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.002423
2040	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.003423

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2040	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002597
2040	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000572
2040	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000544
2040	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2040	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2040	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2040	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.019848
2040	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.009439
2040	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.00739
2040	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004837
2040	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001064
2040	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001011
2040	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008319
2040	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007002
2040	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029561
2040	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.009099
2040	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008447
2040	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.077314
2040	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2040	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2040	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2040	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036976
2040	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2040	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2040	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.793241
2040	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2040	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080066
2040	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2040	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078137
2040	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010162
2040	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.030009
2040	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078864
2041	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.004261
2041	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.002298
2041	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.003266
2041	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002519
2041	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000555
2041	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000528
2041	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2041	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2041	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2041	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.019216
2041	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.009215
2041	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.007155
2041	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004849
2041	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001067

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2041	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001013
2041	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008306
2041	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007
2041	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.02956
2041	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.008394
2041	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008446
2041	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.077431
2041	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2041	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2041	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2041	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036963
2041	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2041	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2041	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.793867
2041	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2041	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080069
2041	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2041	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078137
2041	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010131
2041	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.030025
2041	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078819
2042	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.004036
2042	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.002195
2042	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.003135
2042	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002454
2042	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000541
2042	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000514
2042	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2042	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2042	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2042	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.018669
2042	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.00902
2042	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.006951
2042	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004857
2042	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001069
2042	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001015
2042	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008298
2042	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007002
2042	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029579
2042	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.007995
2042	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008445
2042	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.077617
2042	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2042	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2042	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2042	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036957

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2042	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2042	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2042	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.794417
2042	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2042	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080073
2042	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2042	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078137
2042	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010104
2042	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.030047
2042	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078757
2043	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.00385
2043	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.00211
2043	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.003026
2043	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002398
2043	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000528
2043	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000503
2043	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2043	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2043	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2043	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.018243
2043	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.008866
2043	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.006792
2043	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004864
2043	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.00107
2043	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001017
2043	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008294
2043	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007005
2043	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029601
2043	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.007795
2043	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008444
2043	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.077852
2043	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2043	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2043	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2043	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036957
2043	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2043	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2043	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.794833
2043	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2043	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080077
2043	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2043	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078137
2043	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010086
2043	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.030068
2043	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078696
2044	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.003693

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2044	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.00204
2044	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.00293
2044	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002352
2044	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000518
2044	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000493
2044	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2044	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2044	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2044	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.017806
2044	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.008715
2044	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.006629
2044	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004867
2044	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001071
2044	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001017
2044	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.00829
2044	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007009
2044	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029626
2044	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.007705
2044	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008444
2044	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.078104
2044	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2044	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2044	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2044	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036957
2044	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2044	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2044	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.795343
2044	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2044	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080076
2044	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2044	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078138
2044	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010068
2044	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.030088
2044	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078638
2045	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.00356
2045	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.001981
2045	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.002847
2045	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002312
2045	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.00051
2045	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000485
2045	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2045	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2045	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2045	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.017442
2045	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.008587
2045	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.006494

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2045	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004868
2045	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001071
2045	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001017
2045	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008286
2045	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007013
2045	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029653
2045	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.007668
2045	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008444
2045	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.07834
2045	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2045	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2045	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2045	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036957
2045	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2045	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2045	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.795759
2045	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2045	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080075
2045	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2045	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.07814
2045	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010048
2045	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.030108
2045	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078582
2046	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.003461
2046	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.001935
2046	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.002779
2046	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.00228
2046	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000502
2046	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000478
2046	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2046	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2046	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2046	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.017094
2046	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.008467
2046	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.006364
2046	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004869
2046	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001071
2046	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001018
2046	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008282
2046	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007016
2046	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029672
2046	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.007655
2046	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008444
2046	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.078523
2046	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2046	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675

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2046	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2046	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036957
2046	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2046	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2046	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.796187
2046	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2046	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080073
2046	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2046	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078142
2046	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.01003
2046	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.030122
2046	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078541
2047	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.003375
2047	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.001897
2047	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.00272
2047	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002253
2047	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000496
2047	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000472
2047	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2047	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2047	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2047	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.016808
2047	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.008367
2047	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.006258
2047	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004869
2047	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001071
2047	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001018
2047	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.00828
2047	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007018
2047	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029689
2047	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.00765
2047	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008443
2047	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.078645
2047	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2047	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2047	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2047	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036953
2047	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2047	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2047	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.796532
2047	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2047	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080073
2047	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2047	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078144
2047	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010016
2047	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.030136

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2047	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078502
2048	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.003322
2048	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.001862
2048	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.002662
2048	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.00223
2048	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000491
2048	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000467
2048	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2048	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2048	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2048	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.016552
2048	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.008278
2048	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.006162
2048	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004868
2048	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001071
2048	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001017
2048	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008281
2048	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.00702
2048	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029705
2048	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.00765
2048	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008443
2048	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.078691
2048	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2048	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2048	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2048	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036947
2048	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2048	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2048	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.796862
2048	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2048	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080072
2048	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2048	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078147
2048	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.010002
2048	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.030149
2048	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078464
2049	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.003277
2049	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.00183
2049	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.002605
2049	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002216
2049	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000488
2049	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000464
2049	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2049	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2049	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2049	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.016305

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calendar year	Season Month	Sub_Area	Vehicle Class	Fuel	Temp-erature	Relativ Humidi	Process	Speed Time	Pollutant	Emission Rate
2049	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.008195
2049	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.006071
2049	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004879
2049	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001073
2049	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.00102
2049	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008284
2049	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007023
2049	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029724
2049	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.007651
2049	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008442
2049	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.078659
2049	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2049	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2049	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2049	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036944
2049	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2049	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2049	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.7972
2049	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2049	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.08007
2049	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2049	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078149
2049	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.009991
2049	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.030162
2049	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078428
2050	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	10	PM10	0.003237
2050	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	35	PM10	0.001802
2050	Annual	Riverside (S	NonTruck	Dsl	51	50	RUNEX	65	PM10	0.002554
2050	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	10	PM10	0.002205
2050	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	35	PM10	0.000486
2050	Annual	Riverside (S	NonTruck	Gas	51	50	RUNEX	65	PM10	0.000462
2050	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	10	PM10	0.004866
2050	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	35	PM10	0.001466
2050	Annual	Riverside (S	NonTruck	NG	51	50	RUNEX	65	PM10	0.001684
2050	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	10	PM10	0.016029
2050	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	35	PM10	0.008105
2050	Annual	Riverside (S	Truck1	Dsl	51	50	RUNEX	65	PM10	0.005968
2050	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	10	PM10	0.004884
2050	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	35	PM10	0.001075
2050	Annual	Riverside (S	Truck1	Gas	51	50	RUNEX	65	PM10	0.001021
2050	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	10	PM10	0.008289
2050	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	35	PM10	0.007027
2050	Annual	Riverside (S	Truck2	Dsl	51	50	RUNEX	65	PM10	0.029748
2050	Annual	Riverside (S	NonTruck	Dsl			IDLEX		PM10	0.007653
2050	Annual	Riverside (S	NonTruck	Dsl			PMTW		PM10	0.008441
2050	Annual	Riverside (S	NonTruck	Dsl			PMBW		PM10	0.078557

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calendar year	Season Month	Sub_Area	Vehicle Class	Fuel	Temp-erature	Relativ Humidi	Process	Speed Time	Pollutant	Emission Rate
2050	Annual	Riverside (S	NonTruck	Elec			PMTW		PM10	0.008
2050	Annual	Riverside (S	NonTruck	Elec			PMBW		PM10	0.03675
2050	Annual	Riverside (S	NonTruck	Gas			PMTW		PM10	0.007989
2050	Annual	Riverside (S	NonTruck	Gas			PMBW		PM10	0.036944
2050	Annual	Riverside (S	NonTruck	NG			PMTW		PM10	0.029423
2050	Annual	Riverside (S	NonTruck	NG			PMBW		PM10	0.080557
2050	Annual	Riverside (S	Truck1	Dsl			IDLEX		PM10	0.797622
2050	Annual	Riverside (S	Truck1	Dsl			PMTW		PM10	0.012
2050	Annual	Riverside (S	Truck1	Dsl			PMBW		PM10	0.080064
2050	Annual	Riverside (S	Truck1	Gas			PMTW		PM10	0.008
2050	Annual	Riverside (S	Truck1	Gas			PMBW		PM10	0.078149
2050	Annual	Riverside (S	Truck2	Dsl			IDLEX		PM10	0.009982
2050	Annual	Riverside (S	Truck2	Dsl			PMTW		PM10	0.030174
2050	Annual	Riverside (S	Truck2	Dsl			PMBW		PM10	0.078393

APPENDIX C

AERMOD Model Years 2023 – 2024 Construction PM10 Printouts

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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 2/15/2023
** File: C:\Vista Env\2022\22040 Perris Markham\AERMOD\Constr\Constr.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE 945-995 W Markham St Industrial - Construction DPM 2023-2024
   TITLETWO PM10
   MODELOPT DFAULT CONC
   AVERTIME 24 ANNUAL
   URBANOPT 2189641 Riverside_Co
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL Constr.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 = RDOFF
** DESCRSRC Trucks on Markham St & Webster Ave
** PREFIX
** Length of Side = 9.14
** Configuration = Adjacent
** Emission Rate = 1.34E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 477440.959, 3746180.438, 450.00, 0.00, 4.25
** 477435.062, 3745762.271, 450.94, 0.00, 4.25
** 477045.735, 3745760.930, 453.03, 0.00, 4.25
** ------------------------------------------------------------------------
   LOCATION L0000677     VOLUME   477440.895 3746175.866 450.00
   LOCATION L0000678     VOLUME   477440.766 3746166.723 450.00
   LOCATION L0000679     VOLUME   477440.637 3746157.580 450.00
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LOCATION L0000680 VOLUME 477440.508 3746148.437 450.00
LOCATION L0000681 VOLUME 477440.379 3746139.294 450.00
LOCATION L0000682 VOLUME 477440.250 3746130.151 450.00
LOCATION L0000683 VOLUME 477440.121 3746121.008 450.00
LOCATION L0000684 VOLUME 477439.992 3746111.864 450.00
LOCATION L0000685 VOLUME 477439.863 3746102.721 450.00
LOCATION L0000686 VOLUME 477439.734 3746093.578 450.00
LOCATION L0000687 VOLUME 477439.605 3746084.435 450.00
LOCATION L0000688 VOLUME 477439.476 3746075.292 450.00
LOCATION L0000689 VOLUME 477439.347 3746066.149 450.00
LOCATION L0000690 VOLUME 477439.218 3746057.006 450.00
LOCATION L0000691 VOLUME 477439.090 3746047.863 450.00
LOCATION L0000692 VOLUME 477438.961 3746038.720 450.00
LOCATION L0000693 VOLUME 477438.832 3746029.577 450.00
LOCATION L0000694 VOLUME 477438.703 3746020.434 450.00
LOCATION L0000695 VOLUME 477438.574 3746011.290 450.00
LOCATION L0000696 VOLUME 477438.445 3746002.147 450.00
LOCATION L0000697 VOLUME 477438.316 3745993.004 450.00
LOCATION L0000698 VOLUME 477438.187 3745983.861 450.00
LOCATION L0000699 VOLUME 477438.058 3745974.718 450.00
LOCATION L0000700 VOLUME 477437.929 3745965.575 450.00
LOCATION L0000701 VOLUME 477437.800 3745956.432 450.00
LOCATION L0000702 VOLUME 477437.671 3745947.289 450.00
LOCATION L0000703 VOLUME 477437.542 3745938.146 450.00
LOCATION L0000704 VOLUME 477437.413 3745929.003 450.00
LOCATION L0000705 VOLUME 477437.284 3745919.860 450.00
LOCATION L0000706 VOLUME 477437.155 3745910.716 450.00
LOCATION L0000707 VOLUME 477437.026 3745901.573 450.00
LOCATION L0000708 VOLUME 477436.897 3745892.430 450.00
LOCATION L0000709 VOLUME 477436.768 3745883.287 450.00
LOCATION L0000710 VOLUME 477436.639 3745874.144 450.00
LOCATION L0000711 VOLUME 477436.511 3745865.001 450.00
LOCATION L0000712 VOLUME 477436.382 3745855.858 450.00
LOCATION L0000713 VOLUME 477436.253 3745846.715 450.00
LOCATION L0000714 VOLUME 477436.124 3745837.572 450.00
LOCATION L0000715 VOLUME 477435.995 3745828.429 450.00
LOCATION L0000716 VOLUME 477435.866 3745819.286 450.00
LOCATION L0000717 VOLUME 477435.737 3745810.142 450.16
LOCATION L0000718 VOLUME 477435.608 3745800.999 450.41
LOCATION L0000719 VOLUME 477435.479 3745791.856 450.66
LOCATION L0000720 VOLUME 477435.350 3745782.713 450.82
LOCATION L0000721 VOLUME 477435.221 3745773.570 450.82
LOCATION L0000722 VOLUME 477435.092 3745764.427 450.83
LOCATION L0000723 VOLUME 477428.073 3745762.247 451.00
LOCATION L0000724 VOLUME 477418.930 3745762.216 451.00
LOCATION L0000725 VOLUME 477409.786 3745762.184 451.00
LOCATION L0000726 VOLUME 477400.642 3745762.153 451.00
LOCATION L0000727 VOLUME 477391.498 3745762.121 451.00
LOCATION L0000728 VOLUME 477382.354 3745762.090 451.00
LOCATION L0000729 VOLUME 477373.210 3745762.058 451.00
LOCATION L0000730 VOLUME 477364.066 3745762.027 451.00
LOCATION L0000731 VOLUME 477354.922 3745761.995 451.00
LOCATION L0000732 VOLUME 477345.778 3745761.964 451.00
LOCATION L0000733 VOLUME 477336.634 3745761.932 451.00

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   LOCATION L0000734     VOLUME   477327.490 3745761.901 451.00
   LOCATION L0000735     VOLUME   477318.346 3745761.869 451.00
   LOCATION L0000736     VOLUME   477309.202 3745761.838 451.02
   LOCATION L0000737     VOLUME   477300.058 3745761.806 451.33
   LOCATION L0000738     VOLUME   477290.914 3745761.775 451.63
   LOCATION L0000739     VOLUME   477281.770 3745761.743 451.94
   LOCATION L0000740     VOLUME   477272.626 3745761.712 452.00
   LOCATION L0000741     VOLUME   477263.482 3745761.680 452.00
   LOCATION L0000742     VOLUME   477254.338 3745761.649 452.00
   LOCATION L0000743     VOLUME   477245.195 3745761.617 452.00
   LOCATION L0000744     VOLUME   477236.051 3745761.586 452.00
   LOCATION L0000745     VOLUME   477226.907 3745761.554 452.00
   LOCATION L0000746     VOLUME   477217.763 3745761.523 452.00
   LOCATION L0000747     VOLUME   477208.619 3745761.491 452.00
   LOCATION L0000748     VOLUME   477199.475 3745761.460 452.00
   LOCATION L0000749     VOLUME   477190.331 3745761.428 452.00
   LOCATION L0000750     VOLUME   477181.187 3745761.397 452.00
   LOCATION L0000751     VOLUME   477172.043 3745761.365 452.00
   LOCATION L0000752     VOLUME   477162.899 3745761.334 452.00
   LOCATION L0000753     VOLUME   477153.755 3745761.303 452.17
   LOCATION L0000754     VOLUME   477144.611 3745761.271 452.42
   LOCATION L0000755     VOLUME   477135.467 3745761.240 452.68
   LOCATION L0000756     VOLUME   477126.323 3745761.208 452.85
   LOCATION L0000757     VOLUME   477117.179 3745761.177 452.90
   LOCATION L0000758     VOLUME   477108.035 3745761.145 452.96
   LOCATION L0000759     VOLUME   477098.891 3745761.114 453.00
   LOCATION L0000760     VOLUME   477089.747 3745761.082 453.00
   LOCATION L0000761     VOLUME   477080.604 3745761.051 453.00
   LOCATION L0000762     VOLUME   477071.460 3745761.019 453.00
   LOCATION L0000763     VOLUME   477062.316 3745760.988 453.00
   LOCATION L0000764     VOLUME   477053.172 3745760.956 453.00
** End of LINE VOLUME Source ID = RDOFF
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDONCO
** DESCRSRC Onsite Truck Travel Construction
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 2.81E-07
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 4
** 477046.415, 3745753.459, 453.04, 0.00, 1.70
** 477046.846, 3745707.362, 453.07, 0.00, 1.70
** 477217.907, 3745706.173, 452.00, 0.00, 1.70
** 477217.362, 3745750.169, 452.00, 0.00, 1.70
** ----------------------------------------------------------------------
   LOCATION L0000765     VOLUME   477046.432 3745751.630 453.00
   LOCATION L0000766     VOLUME   477046.466 3745747.973 453.00
   LOCATION L0000767     VOLUME   477046.500 3745744.316 453.00
   LOCATION L0000768     VOLUME   477046.535 3745740.658 453.00
   LOCATION L0000769     VOLUME   477046.569 3745737.001 453.00
   LOCATION L0000770     VOLUME   477046.603 3745733.343 453.00
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LOCATION L0000771 VOLUME 477046.637 3745729.686 453.00
LOCATION L0000772 VOLUME 477046.672 3745726.028 453.00
LOCATION L0000773 VOLUME 477046.706 3745722.371 453.00
LOCATION L0000774 VOLUME 477046.740 3745718.713 453.00
LOCATION L0000775 VOLUME 477046.774 3745715.056 453.00
LOCATION L0000776 VOLUME 477046.808 3745711.399 453.00
LOCATION L0000777 VOLUME 477046.843 3745707.741 453.00
LOCATION L0000778 VOLUME 477050.124 3745707.339 453.00
LOCATION L0000779 VOLUME 477053.782 3745707.314 453.00
LOCATION L0000780 VOLUME 477057.439 3745707.288 453.00
LOCATION L0000781 VOLUME 477061.097 3745707.263 453.00
LOCATION L0000782 VOLUME 477064.754 3745707.237 453.00
LOCATION L0000783 VOLUME 477068.412 3745707.212 453.00
LOCATION L0000784 VOLUME 477072.069 3745707.186 453.00
LOCATION L0000785 VOLUME 477075.727 3745707.161 453.00
LOCATION L0000786 VOLUME 477079.384 3745707.136 453.00
LOCATION L0000787 VOLUME 477083.042 3745707.110 453.00
LOCATION L0000788 VOLUME 477086.699 3745707.085 453.00
LOCATION L0000789 VOLUME 477090.357 3745707.059 453.00
LOCATION L0000790 VOLUME 477094.014 3745707.034 453.00
LOCATION L0000791 VOLUME 477097.672 3745707.008 453.00
LOCATION L0000792 VOLUME 477101.329 3745706.983 453.00
LOCATION L0000793 VOLUME 477104.987 3745706.958 453.00
LOCATION L0000794 VOLUME 477108.644 3745706.932 453.00
LOCATION L0000795 VOLUME 477112.302 3745706.907 453.00
LOCATION L0000796 VOLUME 477115.959 3745706.881 453.00
LOCATION L0000797 VOLUME 477119.617 3745706.856 453.00
LOCATION L0000798 VOLUME 477123.274 3745706.830 453.00
LOCATION L0000799 VOLUME 477126.932 3745706.805 453.00
LOCATION L0000800 VOLUME 477130.589 3745706.780 452.98
LOCATION L0000801 VOLUME 477134.247 3745706.754 452.85
LOCATION L0000802 VOLUME 477137.904 3745706.729 452.73
LOCATION L0000803 VOLUME 477141.562 3745706.703 452.61
LOCATION L0000804 VOLUME 477145.220 3745706.678 452.49
LOCATION L0000805 VOLUME 477148.877 3745706.653 452.37
LOCATION L0000806 VOLUME 477152.535 3745706.627 452.24
LOCATION L0000807 VOLUME 477156.192 3745706.602 452.12
LOCATION L0000808 VOLUME 477159.850 3745706.576 452.00
LOCATION L0000809 VOLUME 477163.507 3745706.551 452.00
LOCATION L0000810 VOLUME 477167.165 3745706.525 452.00
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LOCATION L0000814 VOLUME 477181.795 3745706.424 452.00
LOCATION L0000815 VOLUME 477185.452 3745706.398 452.00
LOCATION L0000816 VOLUME 477189.110 3745706.373 452.00
LOCATION L0000817 VOLUME 477192.767 3745706.347 452.00
LOCATION L0000818 VOLUME 477196.425 3745706.322 452.00
LOCATION L0000819 VOLUME 477200.082 3745706.297 452.00
LOCATION L0000820 VOLUME 477203.740 3745706.271 452.00
LOCATION L0000821 VOLUME 477207.397 3745706.246 452.00
LOCATION L0000822 VOLUME 477211.055 3745706.220 452.00
LOCATION L0000823 VOLUME 477214.712 3745706.195 452.00
LOCATION L0000824 VOLUME 477217.901 3745706.636 452.00

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   LOCATION L0000825     VOLUME   477217.856 3745710.293 452.00
   LOCATION L0000826     VOLUME   477217.810 3745713.950 452.00
   LOCATION L0000827     VOLUME   477217.765 3745717.608 452.00
   LOCATION L0000828     VOLUME   477217.720 3745721.265 452.00
   LOCATION L0000829     VOLUME   477217.674 3745724.922 452.00
   LOCATION L0000830     VOLUME   477217.629 3745728.580 452.00
   LOCATION L0000831     VOLUME   477217.584 3745732.237 452.00
   LOCATION L0000832     VOLUME   477217.539 3745735.894 452.00
   LOCATION L0000833     VOLUME   477217.493 3745739.552 452.00
   LOCATION L0000834     VOLUME   477217.448 3745743.209 452.00
   LOCATION L0000835     VOLUME   477217.403 3745746.866 452.00
** End of LINE VOLUME Source ID = RDONCO
   LOCATION IDLE         POINT      477134.323  3745697.577      452.850
** DESCRSRC Truck Idling Onsite
   LOCATION OFFROAD      POINT      477134.200  3745702.350      452.860
** DESCRSRC Offroad Construction Equipment
** Source Parameters **
** LINE VOLUME Source ID = RDOFF
   SRCPARAM L0000677     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000678     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000679     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000680     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000681     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000682     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000683     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000684     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000685     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000686     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000687     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000688     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000689     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000690     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000691     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000692     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000693     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000694     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000695     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000696     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000697     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000698     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000699     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000700     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000701     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000702     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000703     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000704     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000705     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000706     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000707     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000708     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000709     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000710     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000711     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000712     0.00000001523      0.00      4.25      0.85
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   SRCPARAM L0000713     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000714     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000715     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000716     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000717     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000718     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000719     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000720     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000721     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000722     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000723     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000724     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000725     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000726     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000727     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000728     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000729     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000730     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000731     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000732     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000733     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000734     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000735     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000736     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000737     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000738     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000739     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000740     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000741     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000742     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000743     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000744     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000745     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000746     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000747     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000748     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000749     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000750     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000751     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000752     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000753     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000754     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000755     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000756     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000757     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000758     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000759     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000760     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000761     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000762     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000763     0.00000001523      0.00      4.25      0.85
   SRCPARAM L0000764     0.00000001523      0.00      4.25      0.85
** ------------------------------------------------------------------------
** LINE VOLUME Source ID = RDONCO
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SRCPARAM L0000765     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000766     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000767     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000768     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000769     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000770     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000771     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000772     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000773     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000774     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000775     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000776     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000777     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000778     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000779     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000780     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000781     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000782     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000783     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000784     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000785     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000786     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000787     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000788     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000789     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000790     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000791     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000792     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000793     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000794     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000795     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000796     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000797     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000798     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000799     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000800     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000801     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000802     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000803     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000804     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000805     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000806     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000807     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000808     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000809     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000810     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000811     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000812     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000813     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000814     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000815     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000816     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000817     0.000000003958      0.00      1.70      0.85
SRCPARAM L0000818     0.000000003958      0.00      1.70      0.85
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   SRCPARAM L0000819     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000820     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000821     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000822     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000823     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000824     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000825     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000826     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000827     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000828     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000829     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000830     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000831     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000832     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000833     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000834     0.000000003958      0.00      1.70      0.85
   SRCPARAM L0000835     0.000000003958      0.00      1.70      0.85
** ------------------------------------------------------------------
   SRCPARAM IDLE          4.01E-07     3.840   366.000        50       0.1
   SRCPARAM OFFROAD        0.00636     3.962   366.000        50       0.1

** Building Downwash **
   BUILDHGT IDLE            12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE            12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE            12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE            12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE            12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE            12.19    12.19    12.19    12.19    12.19    12.19

   BUILDWID IDLE           159.89   163.10   161.37   154.73   143.38   127.68
   BUILDWID IDLE           108.11    85.24    59.80    75.68    89.99   108.48
   BUILDWID IDLE           126.35   140.38   150.15   155.35   155.83   151.82
   BUILDWID IDLE           159.89   163.10   161.37   154.73   143.38   127.68
   BUILDWID IDLE           108.11    85.24    59.80    75.68    89.99   108.48
   BUILDWID IDLE           126.35   140.38   150.15   155.35   155.83   151.82

   BUILDLEN IDLE            75.68    89.99   108.48   126.35   140.38   150.15
   BUILDLEN IDLE           155.35   155.83   151.82   159.89   163.10   161.37
   BUILDLEN IDLE           154.73   143.38   127.68   108.11    85.24    59.80
   BUILDLEN IDLE            75.68    89.99   108.48   126.35   140.38   150.15
   BUILDLEN IDLE           155.35   155.83   151.82   159.89   163.10   161.37
   BUILDLEN IDLE           154.73   143.38   127.68   108.11    85.24    59.80

   XBADJ    IDLE            -6.60    -1.80    -3.85    -8.47   -12.82   -16.79
   XBADJ    IDLE           -20.24   -23.08   -25.22   -33.26   -40.31   -46.13
   XBADJ    IDLE           -50.55   -53.43   -54.69   -54.28   -52.23   -48.59
   XBADJ    IDLE           -69.08   -88.19  -104.63  -117.89  -127.56  -133.36
   XBADJ    IDLE          -135.11  -132.75  -126.60  -126.62  -122.80  -115.24
   XBADJ    IDLE          -104.18   -89.96   -73.00   -53.82   -33.01   -11.21

   YBADJ    IDLE           -46.68   -41.24   -34.56   -26.82   -18.26    -9.16
   YBADJ    IDLE             0.23     9.61    18.69    31.24    43.20    50.39
   YBADJ    IDLE            54.71    57.37    58.29    57.43    54.83    50.69
   YBADJ    IDLE            46.68    41.24    34.56    26.82    18.26     9.16
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   YBADJ    IDLE            -0.23    -9.61   -18.69   -31.24   -43.20   -50.39
   YBADJ    IDLE           -54.71   -57.37   -58.29   -57.43   -54.83   -50.69

   URBANSRC ALL

** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "Scenario 2"
   EMISFACT IDLE         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT IDLE         HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT IDLE         HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT IDLE         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT OFFROAD      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT OFFROAD      HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT OFFROAD      HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT OFFROAD      HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000677     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000677     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT L0000677     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT L0000677     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000678     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000678     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT L0000678     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT L0000678     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000679     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000679     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT L0000679     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT L0000679     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000680     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000680     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT L0000680     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT L0000680     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000681     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000681     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT L0000681     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT L0000681     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000682     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000682     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT L0000682     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT L0000682     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000683     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000683     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT L0000683     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT L0000683     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000684     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000684     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT L0000684     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT L0000684     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000685     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000685     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT L0000685     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT L0000685     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000686     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT L0000686     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT L0000686     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
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EMISFACT L0000686     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000687     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000687     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000687     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000687     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000688     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000688     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000688     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000688     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000689     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000689     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000689     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000689     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000690     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000690     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000690     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000690     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000691     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000691     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000691     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000691     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000692     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000692     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000692     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000692     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000693     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000693     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000693     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000693     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000694     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000694     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000694     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000694     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000695     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000695     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000695     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000695     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000696     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000696     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000696     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000696     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000697     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000697     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000697     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000697     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000698     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000698     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
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EMISFACT L0000699     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000699     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000700     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT L0000767     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
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EMISFACT L0000827     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000827     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000827     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000828     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000828     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000828     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000828     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000829     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000829     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000829     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000829     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000830     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000830     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000830     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000830     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000831     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000831     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000831     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000831     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000832     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000832     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000832     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000832     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000833     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000833     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000833     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000833     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000834     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000834     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT L0000834     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT L0000834     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT L0000835     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT L0000835     HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT L0000835     HROFDY 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT L0000835     HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED Constr.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\PerrisADJU\PERI_V9_ADJU\PERI_v9.SFC
   PROFFILE ..\PerrisADJU\PERI_V9_ADJU\PERI_v9.PFL
   SURFDATA 3171 2010 Perris
   UAIRDATA 3190 2010
   SITEDATA 99999 2010
   PROFBASE 442.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST CONSTR.AD\24H1GALL.PLT 31
   PLOTFILE ANNUAL ALL CONSTR.AD\AN00GALL.PLT 32
   SUMMFILE Constr.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 ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: ALL
* FOR A TOTAL OF 5 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 YRS	NET ID
477341.00000	3745982.00000	0.00461	451.00	451.00	0.00	ANNUAL	ALL	00000005	
477423.00000	3745980.00000	0.00327	450.00	450.00	0.00	ANNUAL	ALL	00000005	
477464.00000	3745733.00000	0.00401	450.00	450.00	0.00	ANNUAL	ALL	00000005	
477342.00000	3745732.00000	0.01000	451.00	451.00	0.00	ANNUAL	ALL	00000005	
477244.00000	3745732.00000	0.03288	452.00	452.00	0.00	ANNUAL	ALL	00000005	

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

APPENDIX D

AERMOD Model Years 2024 – 2026 Operational PM10 Printouts

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 2/15/2023
** File: C:\Vista Env\2022\22040 Perris Markham\AERMOD\Ops2024\Ops2024.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE 945-995 W Markham St Industrial - Operational DPM 2024-2026
   TITLETWO PM10
   MODELOPT DFAULT CONC
   AVERTIME 24 ANNUAL
   URBANOPT 2189641 Riverside_Co
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL Ops2024.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 = RDOFF
** DESCRSRC Trucks on Markham St & Webster Ave
** PREFIX
** Length of Side = 9.14
** Configuration = Adjacent
** Emission Rate = 2.85E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 477440.959, 3746180.438, 450.00, 0.00, 4.25
** 477435.062, 3745762.271, 450.94, 0.00, 4.25
** 477045.735, 3745760.930, 453.03, 0.00, 4.25
** ------------------------------------------------------------------------
   LOCATION L0000122     VOLUME   477440.895 3746175.866 450.00
   LOCATION L0000123     VOLUME   477440.766 3746166.723 450.00
   LOCATION L0000124     VOLUME   477440.637 3746157.580 450.00
```

LOCATION L0000125 VOLUME 477440.508 3746148.437 450.00
LOCATION L0000126 VOLUME 477440.379 3746139.294 450.00
LOCATION L0000127 VOLUME 477440.250 3746130.151 450.00
LOCATION L0000128 VOLUME 477440.121 3746121.008 450.00
LOCATION L0000129 VOLUME 477439.992 3746111.864 450.00
LOCATION L0000130 VOLUME 477439.863 3746102.721 450.00
LOCATION L0000131 VOLUME 477439.734 3746093.578 450.00
LOCATION L0000132 VOLUME 477439.605 3746084.435 450.00
LOCATION L0000133 VOLUME 477439.476 3746075.292 450.00
LOCATION L0000134 VOLUME 477439.347 3746066.149 450.00
LOCATION L0000135 VOLUME 477439.218 3746057.006 450.00
LOCATION L0000136 VOLUME 477439.090 3746047.863 450.00
LOCATION L0000137 VOLUME 477438.961 3746038.720 450.00
LOCATION L0000138 VOLUME 477438.832 3746029.577 450.00
LOCATION L0000139 VOLUME 477438.703 3746020.434 450.00
LOCATION L0000140 VOLUME 477438.574 3746011.290 450.00
LOCATION L0000141 VOLUME 477438.445 3746002.147 450.00
LOCATION L0000142 VOLUME 477438.316 3745993.004 450.00
LOCATION L0000143 VOLUME 477438.187 3745983.861 450.00
LOCATION L0000144 VOLUME 477438.058 3745974.718 450.00
LOCATION L0000145 VOLUME 477437.929 3745965.575 450.00
LOCATION L0000146 VOLUME 477437.800 3745956.432 450.00
LOCATION L0000147 VOLUME 477437.671 3745947.289 450.00
LOCATION L0000148 VOLUME 477437.542 3745938.146 450.00
LOCATION L0000149 VOLUME 477437.413 3745929.003 450.00
LOCATION L0000150 VOLUME 477437.284 3745919.860 450.00
LOCATION L0000151 VOLUME 477437.155 3745910.716 450.00
LOCATION L0000152 VOLUME 477437.026 3745901.573 450.00
LOCATION L0000153 VOLUME 477436.897 3745892.430 450.00
LOCATION L0000154 VOLUME 477436.768 3745883.287 450.00
LOCATION L0000155 VOLUME 477436.639 3745874.144 450.00
LOCATION L0000156 VOLUME 477436.511 3745865.001 450.00
LOCATION L0000157 VOLUME 477436.382 3745855.858 450.00
LOCATION L0000158 VOLUME 477436.253 3745846.715 450.00
LOCATION L0000159 VOLUME 477436.124 3745837.572 450.00
LOCATION L0000160 VOLUME 477435.995 3745828.429 450.00
LOCATION L0000161 VOLUME 477435.866 3745819.286 450.00
LOCATION L0000162 VOLUME 477435.737 3745810.142 450.16
LOCATION L0000163 VOLUME 477435.608 3745800.999 450.41
LOCATION L0000164 VOLUME 477435.479 3745791.856 450.66
LOCATION L0000165 VOLUME 477435.350 3745782.713 450.82
LOCATION L0000166 VOLUME 477435.221 3745773.570 450.82
LOCATION L0000167 VOLUME 477435.092 3745764.427 450.83
LOCATION L0000168 VOLUME 477428.073 3745762.247 451.00
LOCATION L0000169 VOLUME 477418.930 3745762.216 451.00
LOCATION L0000170 VOLUME 477409.786 3745762.184 451.00
LOCATION L0000171 VOLUME 477400.642 3745762.153 451.00
LOCATION L0000172 VOLUME 477391.498 3745762.121 451.00
LOCATION L0000173 VOLUME 477382.354 3745762.090 451.00
LOCATION L0000174 VOLUME 477373.210 3745762.058 451.00
LOCATION L0000175 VOLUME 477364.066 3745762.027 451.00
LOCATION L0000176 VOLUME 477354.922 3745761.995 451.00
LOCATION L0000177 VOLUME 477345.778 3745761.964 451.00
LOCATION L0000178 VOLUME 477336.634 3745761.932 451.00

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   LOCATION L0000179     VOLUME   477327.490 3745761.901 451.00
   LOCATION L0000180     VOLUME   477318.346 3745761.869 451.00
   LOCATION L0000181     VOLUME   477309.202 3745761.838 451.02
   LOCATION L0000182     VOLUME   477300.058 3745761.806 451.33
   LOCATION L0000183     VOLUME   477290.914 3745761.775 451.63
   LOCATION L0000184     VOLUME   477281.770 3745761.743 451.94
   LOCATION L0000185     VOLUME   477272.626 3745761.712 452.00
   LOCATION L0000186     VOLUME   477263.482 3745761.680 452.00
   LOCATION L0000187     VOLUME   477254.338 3745761.649 452.00
   LOCATION L0000188     VOLUME   477245.195 3745761.617 452.00
   LOCATION L0000189     VOLUME   477236.051 3745761.586 452.00
   LOCATION L0000190     VOLUME   477226.907 3745761.554 452.00
   LOCATION L0000191     VOLUME   477217.763 3745761.523 452.00
   LOCATION L0000192     VOLUME   477208.619 3745761.491 452.00
   LOCATION L0000193     VOLUME   477199.475 3745761.460 452.00
   LOCATION L0000194     VOLUME   477190.331 3745761.428 452.00
   LOCATION L0000195     VOLUME   477181.187 3745761.397 452.00
   LOCATION L0000196     VOLUME   477172.043 3745761.365 452.00
   LOCATION L0000197     VOLUME   477162.899 3745761.334 452.00
   LOCATION L0000198     VOLUME   477153.755 3745761.303 452.17
   LOCATION L0000199     VOLUME   477144.611 3745761.271 452.42
   LOCATION L0000200     VOLUME   477135.467 3745761.240 452.68
   LOCATION L0000201     VOLUME   477126.323 3745761.208 452.85
   LOCATION L0000202     VOLUME   477117.179 3745761.177 452.90
   LOCATION L0000203     VOLUME   477108.035 3745761.145 452.96
   LOCATION L0000204     VOLUME   477098.891 3745761.114 453.00
   LOCATION L0000205     VOLUME   477089.747 3745761.082 453.00
   LOCATION L0000206     VOLUME   477080.604 3745761.051 453.00
   LOCATION L0000207     VOLUME   477071.460 3745761.019 453.00
   LOCATION L0000208     VOLUME   477062.316 3745760.988 453.00
   LOCATION L0000209     VOLUME   477053.172 3745760.956 453.00
** End of LINE VOLUME Source ID = RDOFF
** ------------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDON
** DESCRSRC Onsite Truck Travel
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 7.2E-07
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 477046.415, 3745753.459, 453.04, 0.00, 1.70
** 477046.450, 3745671.689, 453.04, 0.00, 1.70
** 477083.787, 3745671.689, 453.00, 0.00, 1.70
** ------------------------------------------------------------------------
   LOCATION L0000210     VOLUME   477046.416 3745751.630 453.00
   LOCATION L0000211     VOLUME   477046.417 3745747.973 453.00
   LOCATION L0000212     VOLUME   477046.419 3745744.315 453.00
   LOCATION L0000213     VOLUME   477046.420 3745740.658 453.00
   LOCATION L0000214     VOLUME   477046.422 3745737.000 453.00
   LOCATION L0000215     VOLUME   477046.424 3745733.342 453.00
   LOCATION L0000216     VOLUME   477046.425 3745729.685 453.00
```

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   LOCATION L0000217     VOLUME   477046.427 3745726.027 453.00
   LOCATION L0000218     VOLUME   477046.428 3745722.370 453.00
   LOCATION L0000219     VOLUME   477046.430 3745718.712 453.00
   LOCATION L0000220     VOLUME   477046.431 3745715.054 453.00
   LOCATION L0000221     VOLUME   477046.433 3745711.397 453.00
   LOCATION L0000222     VOLUME   477046.434 3745707.739 453.00
   LOCATION L0000223     VOLUME   477046.436 3745704.082 453.00
   LOCATION L0000224     VOLUME   477046.438 3745700.424 453.00
   LOCATION L0000225     VOLUME   477046.439 3745696.766 453.00
   LOCATION L0000226     VOLUME   477046.441 3745693.109 453.00
   LOCATION L0000227     VOLUME   477046.442 3745689.451 453.00
   LOCATION L0000228     VOLUME   477046.444 3745685.794 453.00
   LOCATION L0000229     VOLUME   477046.445 3745682.136 453.00
   LOCATION L0000230     VOLUME   477046.447 3745678.478 453.00
   LOCATION L0000231     VOLUME   477046.448 3745674.821 453.00
   LOCATION L0000232     VOLUME   477046.976 3745671.689 453.00
   LOCATION L0000233     VOLUME   477050.633 3745671.689 453.00
   LOCATION L0000234     VOLUME   477054.291 3745671.689 453.00
   LOCATION L0000235     VOLUME   477057.948 3745671.689 453.00
   LOCATION L0000236     VOLUME   477061.606 3745671.689 453.00
   LOCATION L0000237     VOLUME   477065.264 3745671.689 453.00
   LOCATION L0000238     VOLUME   477068.921 3745671.689 453.00
   LOCATION L0000239     VOLUME   477072.579 3745671.689 453.00
   LOCATION L0000240     VOLUME   477076.236 3745671.689 453.00
   LOCATION L0000241     VOLUME   477079.894 3745671.689 453.00
   LOCATION L0000242     VOLUME   477083.552 3745671.689 453.00
** End of LINE VOLUME Source ID = RDON
   LOCATION IDLE         POINT      477080.020  3745689.650      453.000
** DESCRSRC Truck Idling Onsite
   LOCATION FIREPUMP     POINT      477201.000  3745719.000      452.000
** DESCRSRC Diesel-Powered Fire Pump
** Source Parameters **
** LINE VOLUME Source ID = RDOFF
   SRCPARAM L0000122     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000123     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000124     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000125     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000126     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000127     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000128     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000129     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000130     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000131     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000132     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000133     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000134     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000135     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000136     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000137     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000138     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000139     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000140     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000141     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000142     0.00000003239      0.00      4.25      0.85
```

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SRCPARAM L0000143     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000144     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000145     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000146     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000147     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000148     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000149     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000150     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000151     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000152     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000153     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000154     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000155     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000156     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000157     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000158     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000159     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000160     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000161     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000162     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000163     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000164     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000165     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000166     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000167     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000168     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000169     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000170     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000171     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000172     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000173     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000174     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000175     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000176     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000177     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000178     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000179     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000180     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000181     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000182     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000183     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000184     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000185     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000186     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000187     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000188     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000189     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000190     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000191     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000192     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000193     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000194     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000195     0.00000003239      0.00      4.25      0.85
SRCPARAM L0000196     0.00000003239      0.00      4.25      0.85
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   SRCPARAM L0000197     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000198     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000199     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000200     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000201     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000202     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000203     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000204     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000205     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000206     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000207     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000208     0.00000003239      0.00      4.25      0.85
   SRCPARAM L0000209     0.00000003239      0.00      4.25      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDON
   SRCPARAM L0000210     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000211     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000212     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000213     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000214     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000215     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000216     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000217     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000218     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000219     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000220     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000221     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000222     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000223     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000224     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000225     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000226     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000227     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000228     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000229     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000230     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000231     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000232     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000233     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000234     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000235     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000236     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000237     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000238     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000239     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000240     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000241     0.00000002182      0.00      1.70      0.85
   SRCPARAM L0000242     0.00000002182      0.00      1.70      0.85
** ------------------------------------------------------------------
   SRCPARAM IDLE         0.0000111     3.840   366.000        50       0.1
   SRCPARAM FIREPUMP     0.0000525    14.630   366.000        50       0.1

** Building Downwash **
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
```

```
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19

   BUILDWID IDLE          159.89   163.10   161.37   154.73   143.38   127.68
   BUILDWID IDLE          108.11    85.24    59.80    75.68    89.99   108.48
   BUILDWID IDLE          126.35   140.38   150.15   155.35   155.83   151.82
   BUILDWID IDLE          159.89   163.10   161.37   154.73   143.38   127.68
   BUILDWID IDLE          108.11    85.24    59.80    75.68    89.99   108.48
   BUILDWID IDLE          126.35   140.38   150.15   155.35   155.83   151.82

   BUILDLEN IDLE           75.68    89.99   108.48   126.35   140.38   150.15
   BUILDLEN IDLE          155.35   155.83   151.82   159.89   163.10   161.37
   BUILDLEN IDLE          154.73   143.38   127.68   108.11    85.24    59.80
   BUILDLEN IDLE           75.68    89.99   108.48   126.35   140.38   150.15
   BUILDLEN IDLE          155.35   155.83   151.82   159.89   163.10   161.37
   BUILDLEN IDLE          154.73   143.38   127.68   108.11    85.24    59.80

   XBADJ    IDLE           -6.60    -1.80    -3.85    -8.47   -12.82   -16.79
   XBADJ    IDLE          -20.24   -23.08   -25.22   -33.26   -40.31   -46.13
   XBADJ    IDLE          -50.55   -53.43   -54.69   -54.28   -52.23   -48.59
   XBADJ    IDLE          -69.08   -88.19  -104.63  -117.89  -127.56  -133.36
   XBADJ    IDLE         -135.11  -132.75  -126.60  -126.62  -122.80  -115.24
   XBADJ    IDLE         -104.18   -89.96   -73.00   -53.82   -33.01   -11.21

   YBADJ    IDLE          -46.68   -41.24   -34.56   -26.82   -18.26    -9.16
   YBADJ    IDLE            0.23     9.61    18.69    31.24    43.20    50.39
   YBADJ    IDLE           54.71    57.37    58.29    57.43    54.83    50.69
   YBADJ    IDLE           46.68    41.24    34.56    26.82    18.26     9.16
   YBADJ    IDLE           -0.23    -9.61   -18.69   -31.24   -43.20   -50.39
   YBADJ    IDLE          -54.71   -57.37   -58.29   -57.43   -54.83   -50.69

   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED Ops2024.rou
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\PerrisADJU\PERI_V9_ADJU\PERI_v9.SFC
```

```
   PROFFILE ..\PerrisADJU\PERI_V9_ADJU\PERI_v9.PFL
   SURFDATA 3171 2010 Perris
   UAIRDATA 3190 2010
   SITEDATA 99999 2010
   PROFBASE 442.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST Ops2024.AD\24H1GALL.PLT 31
   PLOTFILE ANNUAL ALL Ops2024.AD\AN00GALL.PLT 32
   SUMMFILE Ops2024.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 ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: ALL
* FOR A TOTAL OF 5 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 YRS	NET ID
477341.00000	3745982.00000	0.00060	451.00	451.00	0.00	ANNUAL	ALL	00000005	
477423.00000	3745980.00000	0.00088	450.00	450.00	0.00	ANNUAL	ALL	00000005	
477464.00000	3745733.00000	0.00057	450.00	450.00	0.00	ANNUAL	ALL	00000005	
477342.00000	3745732.00000	0.00092	451.00	451.00	0.00	ANNUAL	ALL	00000005	
477244.00000	3745732.00000	0.00112	452.00	452.00	0.00	ANNUAL	ALL	00000005	

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

APPENDIX E

AERMOD Model Years 2027 – 2041 Operational PM10 Printouts

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 2/15/2023
** File: C:\Vista Env\2022\22040 Perris Markham\AERMOD\Ops2027\Ops2027.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE 945-995 W Markham St Industrial - Operational DPM 2027-2041
   TITLETWO PM10
   MODELOPT DFAULT CONC
   AVERTIME 24 ANNUAL
   URBANOPT 2189641 Riverside_Co
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL Ops2027.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 = RDOFF
** DESCRSRC Trucks on Markham St & Webster Ave
** PREFIX
** Length of Side = 9.14
** Configuration = Adjacent
** Emission Rate = 2.46E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 477440.959, 3746180.438, 450.00, 0.00, 4.25
** 477435.062, 3745762.271, 450.94, 0.00, 4.25
** 477045.735, 3745760.930, 453.03, 0.00, 4.25
** ------------------------------------------------------------------------
   LOCATION L0000243     VOLUME   477440.895 3746175.866 450.00
   LOCATION L0000244     VOLUME   477440.766 3746166.723 450.00
   LOCATION L0000245     VOLUME   477440.637 3746157.580 450.00
```

LOCATION L0000246 VOLUME 477440.508 3746148.437 450.00
LOCATION L0000247 VOLUME 477440.379 3746139.294 450.00
LOCATION L0000248 VOLUME 477440.250 3746130.151 450.00
LOCATION L0000249 VOLUME 477440.121 3746121.008 450.00
LOCATION L0000250 VOLUME 477439.992 3746111.864 450.00
LOCATION L0000251 VOLUME 477439.863 3746102.721 450.00
LOCATION L0000252 VOLUME 477439.734 3746093.578 450.00
LOCATION L0000253 VOLUME 477439.605 3746084.435 450.00
LOCATION L0000254 VOLUME 477439.476 3746075.292 450.00
LOCATION L0000255 VOLUME 477439.347 3746066.149 450.00
LOCATION L0000256 VOLUME 477439.218 3746057.006 450.00
LOCATION L0000257 VOLUME 477439.090 3746047.863 450.00
LOCATION L0000258 VOLUME 477438.961 3746038.720 450.00
LOCATION L0000259 VOLUME 477438.832 3746029.577 450.00
LOCATION L0000260 VOLUME 477438.703 3746020.434 450.00
LOCATION L0000261 VOLUME 477438.574 3746011.290 450.00
LOCATION L0000262 VOLUME 477438.445 3746002.147 450.00
LOCATION L0000263 VOLUME 477438.316 3745993.004 450.00
LOCATION L0000264 VOLUME 477438.187 3745983.861 450.00
LOCATION L0000265 VOLUME 477438.058 3745974.718 450.00
LOCATION L0000266 VOLUME 477437.929 3745965.575 450.00
LOCATION L0000267 VOLUME 477437.800 3745956.432 450.00
LOCATION L0000268 VOLUME 477437.671 3745947.289 450.00
LOCATION L0000269 VOLUME 477437.542 3745938.146 450.00
LOCATION L0000270 VOLUME 477437.413 3745929.003 450.00
LOCATION L0000271 VOLUME 477437.284 3745919.860 450.00
LOCATION L0000272 VOLUME 477437.155 3745910.716 450.00
LOCATION L0000273 VOLUME 477437.026 3745901.573 450.00
LOCATION L0000274 VOLUME 477436.897 3745892.430 450.00
LOCATION L0000275 VOLUME 477436.768 3745883.287 450.00
LOCATION L0000276 VOLUME 477436.639 3745874.144 450.00
LOCATION L0000277 VOLUME 477436.511 3745865.001 450.00
LOCATION L0000278 VOLUME 477436.382 3745855.858 450.00
LOCATION L0000279 VOLUME 477436.253 3745846.715 450.00
LOCATION L0000280 VOLUME 477436.124 3745837.572 450.00
LOCATION L0000281 VOLUME 477435.995 3745828.429 450.00
LOCATION L0000282 VOLUME 477435.866 3745819.286 450.00
LOCATION L0000283 VOLUME 477435.737 3745810.142 450.16
LOCATION L0000284 VOLUME 477435.608 3745800.999 450.41
LOCATION L0000285 VOLUME 477435.479 3745791.856 450.66
LOCATION L0000286 VOLUME 477435.350 3745782.713 450.82
LOCATION L0000287 VOLUME 477435.221 3745773.570 450.82
LOCATION L0000288 VOLUME 477435.092 3745764.427 450.83
LOCATION L0000289 VOLUME 477428.073 3745762.247 451.00
LOCATION L0000290 VOLUME 477418.930 3745762.216 451.00
LOCATION L0000291 VOLUME 477409.786 3745762.184 451.00
LOCATION L0000292 VOLUME 477400.642 3745762.153 451.00
LOCATION L0000293 VOLUME 477391.498 3745762.121 451.00
LOCATION L0000294 VOLUME 477382.354 3745762.090 451.00
LOCATION L0000295 VOLUME 477373.210 3745762.058 451.00
LOCATION L0000296 VOLUME 477364.066 3745762.027 451.00
LOCATION L0000297 VOLUME 477354.922 3745761.995 451.00
LOCATION L0000298 VOLUME 477345.778 3745761.964 451.00
LOCATION L0000299 VOLUME 477336.634 3745761.932 451.00

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   LOCATION L0000300     VOLUME   477327.490 3745761.901 451.00
   LOCATION L0000301     VOLUME   477318.346 3745761.869 451.00
   LOCATION L0000302     VOLUME   477309.202 3745761.838 451.02
   LOCATION L0000303     VOLUME   477300.058 3745761.806 451.33
   LOCATION L0000304     VOLUME   477290.914 3745761.775 451.63
   LOCATION L0000305     VOLUME   477281.770 3745761.743 451.94
   LOCATION L0000306     VOLUME   477272.626 3745761.712 452.00
   LOCATION L0000307     VOLUME   477263.482 3745761.680 452.00
   LOCATION L0000308     VOLUME   477254.338 3745761.649 452.00
   LOCATION L0000309     VOLUME   477245.195 3745761.617 452.00
   LOCATION L0000310     VOLUME   477236.051 3745761.586 452.00
   LOCATION L0000311     VOLUME   477226.907 3745761.554 452.00
   LOCATION L0000312     VOLUME   477217.763 3745761.523 452.00
   LOCATION L0000313     VOLUME   477208.619 3745761.491 452.00
   LOCATION L0000314     VOLUME   477199.475 3745761.460 452.00
   LOCATION L0000315     VOLUME   477190.331 3745761.428 452.00
   LOCATION L0000316     VOLUME   477181.187 3745761.397 452.00
   LOCATION L0000317     VOLUME   477172.043 3745761.365 452.00
   LOCATION L0000318     VOLUME   477162.899 3745761.334 452.00
   LOCATION L0000319     VOLUME   477153.755 3745761.303 452.17
   LOCATION L0000320     VOLUME   477144.611 3745761.271 452.42
   LOCATION L0000321     VOLUME   477135.467 3745761.240 452.68
   LOCATION L0000322     VOLUME   477126.323 3745761.208 452.85
   LOCATION L0000323     VOLUME   477117.179 3745761.177 452.90
   LOCATION L0000324     VOLUME   477108.035 3745761.145 452.96
   LOCATION L0000325     VOLUME   477098.891 3745761.114 453.00
   LOCATION L0000326     VOLUME   477089.747 3745761.082 453.00
   LOCATION L0000327     VOLUME   477080.604 3745761.051 453.00
   LOCATION L0000328     VOLUME   477071.460 3745761.019 453.00
   LOCATION L0000329     VOLUME   477062.316 3745760.988 453.00
   LOCATION L0000330     VOLUME   477053.172 3745760.956 453.00
** End of LINE VOLUME Source ID = RDOFF
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDON
** DESCRSRC Onsite Truck Travel
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 5.4E-07
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 477046.415, 3745753.459, 453.04, 0.00, 1.70
** 477046.450, 3745671.689, 453.04, 0.00, 1.70
** 477083.787, 3745671.689, 453.00, 0.00, 1.70
** ----------------------------------------------------------------------
   LOCATION L0000331     VOLUME   477046.416 3745751.630 453.00
   LOCATION L0000332     VOLUME   477046.417 3745747.973 453.00
   LOCATION L0000333     VOLUME   477046.419 3745744.315 453.00
   LOCATION L0000334     VOLUME   477046.420 3745740.658 453.00
   LOCATION L0000335     VOLUME   477046.422 3745737.000 453.00
   LOCATION L0000336     VOLUME   477046.424 3745733.342 453.00
   LOCATION L0000337     VOLUME   477046.425 3745729.685 453.00
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   LOCATION L0000338     VOLUME   477046.427 3745726.027 453.00
   LOCATION L0000339     VOLUME   477046.428 3745722.370 453.00
   LOCATION L0000340     VOLUME   477046.430 3745718.712 453.00
   LOCATION L0000341     VOLUME   477046.431 3745715.054 453.00
   LOCATION L0000342     VOLUME   477046.433 3745711.397 453.00
   LOCATION L0000343     VOLUME   477046.434 3745707.739 453.00
   LOCATION L0000344     VOLUME   477046.436 3745704.082 453.00
   LOCATION L0000345     VOLUME   477046.438 3745700.424 453.00
   LOCATION L0000346     VOLUME   477046.439 3745696.766 453.00
   LOCATION L0000347     VOLUME   477046.441 3745693.109 453.00
   LOCATION L0000348     VOLUME   477046.442 3745689.451 453.00
   LOCATION L0000349     VOLUME   477046.444 3745685.794 453.00
   LOCATION L0000350     VOLUME   477046.445 3745682.136 453.00
   LOCATION L0000351     VOLUME   477046.447 3745678.478 453.00
   LOCATION L0000352     VOLUME   477046.448 3745674.821 453.00
   LOCATION L0000353     VOLUME   477046.976 3745671.689 453.00
   LOCATION L0000354     VOLUME   477050.633 3745671.689 453.00
   LOCATION L0000355     VOLUME   477054.291 3745671.689 453.00
   LOCATION L0000356     VOLUME   477057.948 3745671.689 453.00
   LOCATION L0000357     VOLUME   477061.606 3745671.689 453.00
   LOCATION L0000358     VOLUME   477065.264 3745671.689 453.00
   LOCATION L0000359     VOLUME   477068.921 3745671.689 453.00
   LOCATION L0000360     VOLUME   477072.579 3745671.689 453.00
   LOCATION L0000361     VOLUME   477076.236 3745671.689 453.00
   LOCATION L0000362     VOLUME   477079.894 3745671.689 453.00
   LOCATION L0000363     VOLUME   477083.552 3745671.689 453.00
** End of LINE VOLUME Source ID = RDON
   LOCATION IDLE         POINT      477080.020  3745689.650      453.000
** DESCRSRC Truck Idling Onsite
   LOCATION FIREPUMP     POINT      477201.000  3745719.000      452.000
** DESCRSRC Diesel Powered Fire Pump
** Source Parameters **
** LINE VOLUME Source ID = RDOFF
   SRCPARAM L0000243     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000244     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000245     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000246     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000247     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000248     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000249     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000250     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000251     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000252     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000253     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000254     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000255     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000256     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000257     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000258     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000259     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000260     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000261     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000262     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000263     0.00000002795      0.00      4.25      0.85
```

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SRCPARAM L0000264     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000265     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000266     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000267     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000268     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000269     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000270     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000271     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000272     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000273     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000274     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000275     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000276     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000277     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000278     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000279     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000280     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000281     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000282     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000283     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000284     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000285     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000286     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000287     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000288     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000289     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000290     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000291     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000292     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000293     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000294     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000295     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000296     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000297     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000298     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000299     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000300     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000301     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000302     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000303     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000304     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000305     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000306     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000307     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000308     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000309     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000310     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000311     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000312     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000313     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000314     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000315     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000316     0.00000002795      0.00      4.25      0.85
SRCPARAM L0000317     0.00000002795      0.00      4.25      0.85
```

```
   SRCPARAM L0000318     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000319     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000320     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000321     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000322     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000323     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000324     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000325     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000326     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000327     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000328     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000329     0.00000002795      0.00      4.25      0.85
   SRCPARAM L0000330     0.00000002795      0.00      4.25      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDON
   SRCPARAM L0000331     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000332     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000333     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000334     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000335     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000336     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000337     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000338     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000339     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000340     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000341     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000342     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000343     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000344     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000345     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000346     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000347     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000348     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000349     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000350     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000351     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000352     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000353     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000354     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000355     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000356     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000357     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000358     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000359     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000360     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000361     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000362     0.00000001636      0.00      1.70      0.85
   SRCPARAM L0000363     0.00000001636      0.00      1.70      0.85
** ------------------------------------------------------------------
   SRCPARAM IDLE          0.000011     3.840   366.000        50       0.1
   SRCPARAM FIREPUMP     0.0000525    14.630   366.000        50       0.1

** Building Downwash **
   BUILDHGT IDLE            12.19    12.19    12.19    12.19    12.19    12.19
```

```
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19

   BUILDWID IDLE          159.89   163.10   161.37   154.73   143.38   127.68
   BUILDWID IDLE          108.11    85.24    59.80    75.68    89.99   108.48
   BUILDWID IDLE          126.35   140.38   150.15   155.35   155.83   151.82
   BUILDWID IDLE          159.89   163.10   161.37   154.73   143.38   127.68
   BUILDWID IDLE          108.11    85.24    59.80    75.68    89.99   108.48
   BUILDWID IDLE          126.35   140.38   150.15   155.35   155.83   151.82

   BUILDLEN IDLE           75.68    89.99   108.48   126.35   140.38   150.15
   BUILDLEN IDLE          155.35   155.83   151.82   159.89   163.10   161.37
   BUILDLEN IDLE          154.73   143.38   127.68   108.11    85.24    59.80
   BUILDLEN IDLE           75.68    89.99   108.48   126.35   140.38   150.15
   BUILDLEN IDLE          155.35   155.83   151.82   159.89   163.10   161.37
   BUILDLEN IDLE          154.73   143.38   127.68   108.11    85.24    59.80

   XBADJ    IDLE           -6.60    -1.80    -3.85    -8.47   -12.82   -16.79
   XBADJ    IDLE          -20.24   -23.08   -25.22   -33.26   -40.31   -46.13
   XBADJ    IDLE          -50.55   -53.43   -54.69   -54.28   -52.23   -48.59
   XBADJ    IDLE          -69.08   -88.19  -104.63  -117.89  -127.56  -133.36
   XBADJ    IDLE         -135.11  -132.75  -126.60  -126.62  -122.80  -115.24
   XBADJ    IDLE         -104.18   -89.96   -73.00   -53.82   -33.01   -11.21

   YBADJ    IDLE          -46.68   -41.24   -34.56   -26.82   -18.26    -9.16
   YBADJ    IDLE            0.23     9.61    18.69    31.24    43.20    50.39
   YBADJ    IDLE           54.71    57.37    58.29    57.43    54.83    50.69
   YBADJ    IDLE           46.68    41.24    34.56    26.82    18.26     9.16
   YBADJ    IDLE           -0.23    -9.61   -18.69   -31.24   -43.20   -50.39
   YBADJ    IDLE          -54.71   -57.37   -58.29   -57.43   -54.83   -50.69

   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED Ops2027.rou
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\PerrisADJU\PERI_V9_ADJU\PERI_v9.SFC
```

```
   PROFFILE ..\PerrisADJU\PERI_V9_ADJU\PERI_v9.PFL
   SURFDATA 3171 2010 Perris
   UAIRDATA 3190 2010
   SITEDATA 99999 2010
   PROFBASE 442.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST OPS2027.AD\24H1GALL.PLT 31
   PLOTFILE ANNUAL ALL OPS2027.AD\AN00GALL.PLT 32
   SUMMFILE Ops2027.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 ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: ALL
* FOR A TOTAL OF 5 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 YRS	NET ID
477341.00000	3745982.00000	0.00059	451.00	451.00	0.00	ANNUAL	ALL	00000005	
477423.00000	3745980.00000	0.00081	450.00	450.00	0.00	ANNUAL	ALL	00000005	
477464.00000	3745733.00000	0.00054	450.00	450.00	0.00	ANNUAL	ALL	00000005	
477342.00000	3745732.00000	0.00087	451.00	451.00	0.00	ANNUAL	ALL	00000005	
477244.00000	3745732.00000	0.00107	452.00	452.00	0.00	ANNUAL	ALL	00000005	

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

APPENDIX F

AERMOD Model Years 2042 – 2053 Operational PM10 Printouts

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.2.0
** Lakes Environmental Software Inc.
** Date: 2/15/2023
** File: C:\Vista Env\2022\22040 Perris Markham\AERMOD\Ops2042\Ops2042.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE 945-995 W Markham St Industrial - Operational DPM 2042-2053
   TITLETWO PM10
   MODELOPT DFAULT CONC
   AVERTIME 24 ANNUAL
   URBANOPT 2189641 Riverside_Co
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL Ops2042.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 = RDOFF
** DESCRSRC Trucks on Markham St & Webster Ave
** PREFIX
** Length of Side = 9.14
** Configuration = Adjacent
** Emission Rate = 2.23E-06
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 477440.959, 3746180.438, 450.00, 0.00, 4.25
** 477435.062, 3745762.271, 450.94, 0.00, 4.25
** 477045.735, 3745760.930, 453.03, 0.00, 4.25
** ------------------------------------------------------------------------
   LOCATION L0000243     VOLUME   477440.895 3746175.866 450.00
   LOCATION L0000244     VOLUME   477440.766 3746166.723 450.00
   LOCATION L0000245     VOLUME   477440.637 3746157.580 450.00
```

LOCATION L0000246 VOLUME 477440.508 3746148.437 450.00
LOCATION L0000247 VOLUME 477440.379 3746139.294 450.00
LOCATION L0000248 VOLUME 477440.250 3746130.151 450.00
LOCATION L0000249 VOLUME 477440.121 3746121.008 450.00
LOCATION L0000250 VOLUME 477439.992 3746111.864 450.00
LOCATION L0000251 VOLUME 477439.863 3746102.721 450.00
LOCATION L0000252 VOLUME 477439.734 3746093.578 450.00
LOCATION L0000253 VOLUME 477439.605 3746084.435 450.00
LOCATION L0000254 VOLUME 477439.476 3746075.292 450.00
LOCATION L0000255 VOLUME 477439.347 3746066.149 450.00
LOCATION L0000256 VOLUME 477439.218 3746057.006 450.00
LOCATION L0000257 VOLUME 477439.090 3746047.863 450.00
LOCATION L0000258 VOLUME 477438.961 3746038.720 450.00
LOCATION L0000259 VOLUME 477438.832 3746029.577 450.00
LOCATION L0000260 VOLUME 477438.703 3746020.434 450.00
LOCATION L0000261 VOLUME 477438.574 3746011.290 450.00
LOCATION L0000262 VOLUME 477438.445 3746002.147 450.00
LOCATION L0000263 VOLUME 477438.316 3745993.004 450.00
LOCATION L0000264 VOLUME 477438.187 3745983.861 450.00
LOCATION L0000265 VOLUME 477438.058 3745974.718 450.00
LOCATION L0000266 VOLUME 477437.929 3745965.575 450.00
LOCATION L0000267 VOLUME 477437.800 3745956.432 450.00
LOCATION L0000268 VOLUME 477437.671 3745947.289 450.00
LOCATION L0000269 VOLUME 477437.542 3745938.146 450.00
LOCATION L0000270 VOLUME 477437.413 3745929.003 450.00
LOCATION L0000271 VOLUME 477437.284 3745919.860 450.00
LOCATION L0000272 VOLUME 477437.155 3745910.716 450.00
LOCATION L0000273 VOLUME 477437.026 3745901.573 450.00
LOCATION L0000274 VOLUME 477436.897 3745892.430 450.00
LOCATION L0000275 VOLUME 477436.768 3745883.287 450.00
LOCATION L0000276 VOLUME 477436.639 3745874.144 450.00
LOCATION L0000277 VOLUME 477436.511 3745865.001 450.00
LOCATION L0000278 VOLUME 477436.382 3745855.858 450.00
LOCATION L0000279 VOLUME 477436.253 3745846.715 450.00
LOCATION L0000280 VOLUME 477436.124 3745837.572 450.00
LOCATION L0000281 VOLUME 477435.995 3745828.429 450.00
LOCATION L0000282 VOLUME 477435.866 3745819.286 450.00
LOCATION L0000283 VOLUME 477435.737 3745810.142 450.16
LOCATION L0000284 VOLUME 477435.608 3745800.999 450.41
LOCATION L0000285 VOLUME 477435.479 3745791.856 450.66
LOCATION L0000286 VOLUME 477435.350 3745782.713 450.82
LOCATION L0000287 VOLUME 477435.221 3745773.570 450.82
LOCATION L0000288 VOLUME 477435.092 3745764.427 450.83
LOCATION L0000289 VOLUME 477428.073 3745762.247 451.00
LOCATION L0000290 VOLUME 477418.930 3745762.216 451.00
LOCATION L0000291 VOLUME 477409.786 3745762.184 451.00
LOCATION L0000292 VOLUME 477400.642 3745762.153 451.00
LOCATION L0000293 VOLUME 477391.498 3745762.121 451.00
LOCATION L0000294 VOLUME 477382.354 3745762.090 451.00
LOCATION L0000295 VOLUME 477373.210 3745762.058 451.00
LOCATION L0000296 VOLUME 477364.066 3745762.027 451.00
LOCATION L0000297 VOLUME 477354.922 3745761.995 451.00
LOCATION L0000298 VOLUME 477345.778 3745761.964 451.00
LOCATION L0000299 VOLUME 477336.634 3745761.932 451.00

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   LOCATION L0000300     VOLUME   477327.490 3745761.901 451.00
   LOCATION L0000301     VOLUME   477318.346 3745761.869 451.00
   LOCATION L0000302     VOLUME   477309.202 3745761.838 451.02
   LOCATION L0000303     VOLUME   477300.058 3745761.806 451.33
   LOCATION L0000304     VOLUME   477290.914 3745761.775 451.63
   LOCATION L0000305     VOLUME   477281.770 3745761.743 451.94
   LOCATION L0000306     VOLUME   477272.626 3745761.712 452.00
   LOCATION L0000307     VOLUME   477263.482 3745761.680 452.00
   LOCATION L0000308     VOLUME   477254.338 3745761.649 452.00
   LOCATION L0000309     VOLUME   477245.195 3745761.617 452.00
   LOCATION L0000310     VOLUME   477236.051 3745761.586 452.00
   LOCATION L0000311     VOLUME   477226.907 3745761.554 452.00
   LOCATION L0000312     VOLUME   477217.763 3745761.523 452.00
   LOCATION L0000313     VOLUME   477208.619 3745761.491 452.00
   LOCATION L0000314     VOLUME   477199.475 3745761.460 452.00
   LOCATION L0000315     VOLUME   477190.331 3745761.428 452.00
   LOCATION L0000316     VOLUME   477181.187 3745761.397 452.00
   LOCATION L0000317     VOLUME   477172.043 3745761.365 452.00
   LOCATION L0000318     VOLUME   477162.899 3745761.334 452.00
   LOCATION L0000319     VOLUME   477153.755 3745761.303 452.17
   LOCATION L0000320     VOLUME   477144.611 3745761.271 452.42
   LOCATION L0000321     VOLUME   477135.467 3745761.240 452.68
   LOCATION L0000322     VOLUME   477126.323 3745761.208 452.85
   LOCATION L0000323     VOLUME   477117.179 3745761.177 452.90
   LOCATION L0000324     VOLUME   477108.035 3745761.145 452.96
   LOCATION L0000325     VOLUME   477098.891 3745761.114 453.00
   LOCATION L0000326     VOLUME   477089.747 3745761.082 453.00
   LOCATION L0000327     VOLUME   477080.604 3745761.051 453.00
   LOCATION L0000328     VOLUME   477071.460 3745761.019 453.00
   LOCATION L0000329     VOLUME   477062.316 3745760.988 453.00
   LOCATION L0000330     VOLUME   477053.172 3745760.956 453.00
** End of LINE VOLUME Source ID = RDOFF
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = RDON
** DESCRSRC Onsite Truck Travel
** PREFIX
** Length of Side = 3.66
** Configuration = Adjacent
** Emission Rate = 4.42E-07
** Vertical Dimension = 1.83
** SZINIT = 0.85
** Nodes = 3
** 477046.415, 3745753.459, 453.04, 0.00, 1.70
** 477046.450, 3745671.689, 453.04, 0.00, 1.70
** 477083.787, 3745671.689, 453.00, 0.00, 1.70
** ----------------------------------------------------------------------
   LOCATION L0000331     VOLUME   477046.416 3745751.630 453.00
   LOCATION L0000332     VOLUME   477046.417 3745747.973 453.00
   LOCATION L0000333     VOLUME   477046.419 3745744.315 453.00
   LOCATION L0000334     VOLUME   477046.420 3745740.658 453.00
   LOCATION L0000335     VOLUME   477046.422 3745737.000 453.00
   LOCATION L0000336     VOLUME   477046.424 3745733.342 453.00
   LOCATION L0000337     VOLUME   477046.425 3745729.685 453.00
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   LOCATION L0000338     VOLUME   477046.427 3745726.027 453.00
   LOCATION L0000339     VOLUME   477046.428 3745722.370 453.00
   LOCATION L0000340     VOLUME   477046.430 3745718.712 453.00
   LOCATION L0000341     VOLUME   477046.431 3745715.054 453.00
   LOCATION L0000342     VOLUME   477046.433 3745711.397 453.00
   LOCATION L0000343     VOLUME   477046.434 3745707.739 453.00
   LOCATION L0000344     VOLUME   477046.436 3745704.082 453.00
   LOCATION L0000345     VOLUME   477046.438 3745700.424 453.00
   LOCATION L0000346     VOLUME   477046.439 3745696.766 453.00
   LOCATION L0000347     VOLUME   477046.441 3745693.109 453.00
   LOCATION L0000348     VOLUME   477046.442 3745689.451 453.00
   LOCATION L0000349     VOLUME   477046.444 3745685.794 453.00
   LOCATION L0000350     VOLUME   477046.445 3745682.136 453.00
   LOCATION L0000351     VOLUME   477046.447 3745678.478 453.00
   LOCATION L0000352     VOLUME   477046.448 3745674.821 453.00
   LOCATION L0000353     VOLUME   477046.976 3745671.689 453.00
   LOCATION L0000354     VOLUME   477050.633 3745671.689 453.00
   LOCATION L0000355     VOLUME   477054.291 3745671.689 453.00
   LOCATION L0000356     VOLUME   477057.948 3745671.689 453.00
   LOCATION L0000357     VOLUME   477061.606 3745671.689 453.00
   LOCATION L0000358     VOLUME   477065.264 3745671.689 453.00
   LOCATION L0000359     VOLUME   477068.921 3745671.689 453.00
   LOCATION L0000360     VOLUME   477072.579 3745671.689 453.00
   LOCATION L0000361     VOLUME   477076.236 3745671.689 453.00
   LOCATION L0000362     VOLUME   477079.894 3745671.689 453.00
   LOCATION L0000363     VOLUME   477083.552 3745671.689 453.00
** End of LINE VOLUME Source ID = RDON
   LOCATION IDLE         POINT     477080.020  3745689.650      453.000
** DESCRSRC Truck Idling Onsite
   LOCATION FIREPUMP     POINT     477201.000  3745719.000      452.000
** DESCRSRC Diesel Powered Fire Pump
** Source Parameters **
** LINE VOLUME Source ID = RDOFF
   SRCPARAM L0000243     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000244     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000245     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000246     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000247     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000248     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000249     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000250     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000251     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000252     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000253     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000254     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000255     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000256     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000257     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000258     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000259     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000260     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000261     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000262     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000263     0.00000002534      0.00      4.25      0.85
```

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SRCPARAM L0000264     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000265     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000266     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000267     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000268     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000269     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000270     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000271     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000272     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000273     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000274     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000275     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000276     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000277     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000278     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000279     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000280     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000281     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000282     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000283     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000284     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000285     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000286     0.00000002534      0.00      4.25      0.85
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SRCPARAM L0000288     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000289     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000290     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000291     0.00000002534      0.00      4.25      0.85
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SRCPARAM L0000293     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000294     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000295     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000296     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000297     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000298     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000299     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000300     0.00000002534      0.00      4.25      0.85
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SRCPARAM L0000302     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000303     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000304     0.00000002534      0.00      4.25      0.85
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SRCPARAM L0000310     0.00000002534      0.00      4.25      0.85
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SRCPARAM L0000312     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000313     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000314     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000315     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000316     0.00000002534      0.00      4.25      0.85
SRCPARAM L0000317     0.00000002534      0.00      4.25      0.85
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   SRCPARAM L0000318     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000319     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000320     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000321     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000322     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000323     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000324     0.00000002534      0.00      4.25      0.85
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   SRCPARAM L0000326     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000327     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000328     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000329     0.00000002534      0.00      4.25      0.85
   SRCPARAM L0000330     0.00000002534      0.00      4.25      0.85
** ------------------------------------------------------------------
** LINE VOLUME Source ID = RDON
   SRCPARAM L0000331     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000332     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000333     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000334     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000335     0.00000001339      0.00      1.70      0.85
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   SRCPARAM L0000337     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000338     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000339     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000340     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000341     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000342     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000343     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000344     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000345     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000346     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000347     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000348     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000349     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000350     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000351     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000352     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000353     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000354     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000355     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000356     0.00000001339      0.00      1.70      0.85
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   SRCPARAM L0000359     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000360     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000361     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000362     0.00000001339      0.00      1.70      0.85
   SRCPARAM L0000363     0.00000001339      0.00      1.70      0.85
** ------------------------------------------------------------------
   SRCPARAM IDLE          0.000011     3.840   366.000        50       0.1
   SRCPARAM FIREPUMP     0.0000525    14.630   366.000       366       0.1

** Building Downwash **
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
```

```
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19
   BUILDHGT IDLE           12.19    12.19    12.19    12.19    12.19    12.19

   BUILDWID IDLE          159.89   163.10   161.37   154.73   143.38   127.68
   BUILDWID IDLE          108.11    85.24    59.80    75.68    89.99   108.48
   BUILDWID IDLE          126.35   140.38   150.15   155.35   155.83   151.82
   BUILDWID IDLE          159.89   163.10   161.37   154.73   143.38   127.68
   BUILDWID IDLE          108.11    85.24    59.80    75.68    89.99   108.48
   BUILDWID IDLE          126.35   140.38   150.15   155.35   155.83   151.82

   BUILDLEN IDLE           75.68    89.99   108.48   126.35   140.38   150.15
   BUILDLEN IDLE          155.35   155.83   151.82   159.89   163.10   161.37
   BUILDLEN IDLE          154.73   143.38   127.68   108.11    85.24    59.80
   BUILDLEN IDLE           75.68    89.99   108.48   126.35   140.38   150.15
   BUILDLEN IDLE          155.35   155.83   151.82   159.89   163.10   161.37
   BUILDLEN IDLE          154.73   143.38   127.68   108.11    85.24    59.80

   XBADJ    IDLE           -6.60    -1.80    -3.85    -8.47   -12.82   -16.79
   XBADJ    IDLE          -20.24   -23.08   -25.22   -33.26   -40.31   -46.13
   XBADJ    IDLE          -50.55   -53.43   -54.69   -54.28   -52.23   -48.59
   XBADJ    IDLE          -69.08   -88.19  -104.63  -117.89  -127.56  -133.36
   XBADJ    IDLE         -135.11  -132.75  -126.60  -126.62  -122.80  -115.24
   XBADJ    IDLE         -104.18   -89.96   -73.00   -53.82   -33.01   -11.21

   YBADJ    IDLE          -46.68   -41.24   -34.56   -26.82   -18.26    -9.16
   YBADJ    IDLE            0.23     9.61    18.69    31.24    43.20    50.39
   YBADJ    IDLE           54.71    57.37    58.29    57.43    54.83    50.69
   YBADJ    IDLE           46.68    41.24    34.56    26.82    18.26     9.16
   YBADJ    IDLE           -0.23    -9.61   -18.69   -31.24   -43.20   -50.39
   YBADJ    IDLE          -54.71   -57.37   -58.29   -57.43   -54.83   -50.69

   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED Ops2042.rou
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\PerrisADJU\PERI_V9_ADJU\PERI_v9.SFC
```

```
   PROFFILE ..\PerrisADJU\PERI_V9_ADJU\PERI_v9.PFL
   SURFDATA 3171 2010 Perris
   UAIRDATA 3190 2010
   SITEDATA 99999 2010
   PROFBASE 442.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST OPS2042.AD\24H1GALL.PLT 31
   PLOTFILE ANNUAL ALL OPS2042.AD\AN00GALL.PLT 32
   SUMMFILE Ops2042.sum
OU FINISHED
**
****************************************
** Project Parameters
****************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS    m
** ZONE     11
** ZONEINX  0
**
```

```
* AERMOD (22112 ): 945-995 W Markham St Industrial - Operational DPM 2042-2053              02/15/23
* AERMET ( 16216):                                                                          13:11:22
* MODELING OPTIONS USED:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
*         PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS   5 YEARS FOR SOURCE GROUP: ALL
*         FOR A TOTAL OF     5 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 YRS   NET ID
* ____________  ____________  ____________  _______  _______  _______  _______  _________  _________  _________
  477341.00000 3745982.00000       0.00027   451.00   451.00     0.00  ANNUAL   ALL       00000005
  477423.00000 3745980.00000       0.00053   450.00   450.00     0.00  ANNUAL   ALL       00000005
  477464.00000 3745733.00000       0.00025   450.00   450.00     0.00  ANNUAL   ALL       00000005
  477342.00000 3745732.00000       0.00043   451.00   451.00     0.00  ANNUAL   ALL       00000005
  477244.00000 3745732.00000       0.00062   452.00   452.00     0.00  ANNUAL   ALL       00000005
** CONCUNIT ug/m^3
** DEPUNIT g/m^2
```