

190TH STREET WAREHOUSE PROJECT AIR QUALITY, GLOBAL CLIMATE CHANGE, HEALTH RISK ASSESSMENT, AND ENERGY IMPACT ANALYSIS

City of Torrance
September 7, 2022
(Updated August 18, 2025)



Traffic Engineering • Transportation Planning • Parking • Noise & Vibration
Air Quality • Global Climate Change • Health Risk Assessment

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prepared by
Katie Wilson, MS
Catherine Howe, MS



GANDDINI GROUP INC
555 Parkcenter Drive, Suite 225
Santa Ana, California 92705
(714) 795-3100 | ganddini.com

Project No. 19260

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EXECUTIVE SUMMARY

The purpose of this air quality, global climate change, health risk assessment and energy impact analysis is to provide an assessment of the impacts resulting from development of the proposed 190th Street Warehouse project and to identify measures that may be necessary to reduce potentially significant impacts.

CONSTRUCTION-SOURCE EMISSIONS

Project construction-source emissions would not exceed applicable regional thresholds of significance established by the South Coast Air Quality Management District (SCAQMD). For localized emissions, the project will not exceed applicable Localized Significance Thresholds (LSTs) established by the SCAQMD.

Project construction-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). As discussed herein, the project will comply with all applicable SCAQMD construction-source emission reduction rules and guidelines. Project construction source emissions would not cause or substantively contribute to violation of the California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS).

Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people. Potential construction-source odor impacts are therefore considered less than significant.

OPERATIONAL-SOURCE EMISSIONS

Project operational-sourced emissions would not exceed applicable regional thresholds of significance established by the SCAQMD. Project operational-source emissions would not result in or cause a significant localized air quality impact as discussed in the Operations-Related Local Air Quality Impacts section of this report. Additionally, project-related trips will not cause or result in CO concentrations exceeding applicable state and/or federal standards (CO "hotspots"). The Diesel Emissions Health Risk Assessment conducted for this project showed that operational DPM emissions from project-related truck trips will not cause a significantly elevated cancer risk or significant non-cancer-related health risk to nearby receptors. When the cancer and non-cancer risks from the Construction HRA (under a separate cover) are combined with the operational cancer and non-cancer risks, the results show that there will be no cumulative cancer or non-cancer related impacts. Project operational-source emissions would therefore not adversely affect sensitive receptors within the vicinity of the project.

Project operational-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). The project's emissions meet SCAQMD regional thresholds and will not result in a significant cumulative impact. The project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential operational-source odor impacts are therefore considered less than significant.

GREENHOUSE GASES

Project-related GHG emissions do not exceed the SCAQMD draft screening threshold of 3,000 MTCO₂e per year for all land uses, and GHG emissions are considered to be less than significant.

Furthermore, as the project's GHG emissions would not exceed the SCAQMD draft screening threshold (based on EO S-3-05). The project would not conflict with the goals of AB-32, SB-32, or the with the City of Torrance Climate Action Plan; therefore, the project would not conflict with an applicable plan, policy or

regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases and impacts are considered to be less than significant.

ENERGY

For new development such as that proposed by 190th Street Warehouse project, compliance with California Building Standards Code Title 24 energy efficiency requirements (CALGreen), are considered demonstrable evidence of efficient use of energy. As discussed below, the project would provide for, and promote, energy efficiencies required under other applicable federal and State of California standards and regulations, and in so doing would meet or exceed all California Building Standards Code Title 24 standards. Moreover, energy consumed by the project's operation is calculated to be comparable to, or less than, energy consumed by other industrial uses of similar scale and intensity that are constructed and operating in California. On this basis, the project would not result in the inefficient, wasteful, or unnecessary consumption of energy. Impacts are considered to be less than significant.

1. INTRODUCTION

This section describes the purpose of this air quality, global climate change, health risk assessment, and energy impact analysis, project location, proposed development, and study area. Figure 1 shows the project location map and Figure 2 illustrates the project site plan.

PURPOSE AND OBJECTIVES

This study was performed to address the possibility of regional/local air quality impacts and global climate change impacts, from project related air emissions.

The original Air Quality, Greenhouse Gas Global Climate Change, Health Risk Assessment, and Energy Analysis (AQ-GHG-HRA-En Analysis) was conducted in May 15, 2020 for a proposed 305,550 square foot warehouse/manufacturing facility with 636 parking spaces. This original analysis was revised August 9, 2021 to respond to comments from CARB and update the analysis using the latest (at the time) version of CalEEMod; version 2020.4.0. The AQ-GHG-HRA-En Analysis was updated again on September 7, 2022 due to changes in the site plan, as the project was reduced to a warehouse/manufacturing building that could range between 270,600 SF (Option B) to 284,130 SF (Option A). Option A, 284,130 SF was analyzed in this version as it was larger (worst-case), and newer versions of the CalEEMod and EMFAC had also been released in the interim; therefore, the project was updated with the latest site plan data, traffic data and the latest emissions models. An AQ-GHG-HRA-Energy Impact Analysis Addendum Technical Memorandum was written on July 3, 2024 due to a reduction in size of the project from a 284,130 SF building (known as Option A) with 600 on-site parking spaces down to a 262,970 SF building with a 572-space parking lot.

The current version of the site plan (Scheme 17, dated 12.16.2024) has 262,970 SF of building space with 552 on-site parking spaces with an additional ~0.57 acres of parking along Crenshaw Place, this analysis is updated to calculate the emissions due to: the changes to the project, the addition of operational equipment per SCAQMD comments, the updates to the latest air quality models (CalEEMod and EMFAC) and to include the emissions from the construction of the additional parking area along Crenshaw Place. The objectives of the study include:

- documentation of the atmospheric setting
- discussion of criteria pollutants and greenhouse gases
- discussion of the air quality and global climate change regulatory framework
- discussion of the air quality, greenhouse gases, and cancer risk thresholds of significance
- analysis of the construction related air quality and greenhouse gas emissions
- analysis of the operations-related air quality and greenhouse gas emissions
- analysis of the operations-related cancer risk from diesel emissions
- analysis of the conformity of the proposed project with the SCAQMD AQMP
- analysis of the project's energy use during construction and operation
- recommendations for mitigation measures

The City of Torrance is the lead agency for this air quality and greenhouse gas analysis, in accordance with the California Environmental Quality Act authorizing legislation. Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with terms unique to air quality and global climate change, a definition of terms has been provided in Appendix A. A construction-related health risk assessment was conducted for this project in a separate document.

PROJECT LOCATION

The proposed project is located at the northeast corner of Crenshaw Place and 190th Street at 2555 West 190th Street in the City of Torrance. Upon initiation of this project, the site was developed with a 160,000

square foot office building with excess surface parking areas. The office building was recently demolished. A vicinity map showing the project location is provided on Figure 1.

According to the SCAQMD's MATES-V study, the project area has an estimated multi-pathway cancer risk of 585 in one million and an inhalation cancer risk of 522 in one million. In comparison, the Basin and Port Area Population-Weighted Cancer Risk (Inhalation Only) for Los Angeles County is 424 in one million. This cancer risk at the project site is largely due to the proximity to the Interstate 405 Freeway.

PROJECT DESCRIPTION

The proposed project includes development of a state-of-the-art industrial warehouse/manufacturing facility that includes: 78,891 square feet (SF) of warehousing; 157,782 SF of manufacturing; 26,297 SF of office; 552 space parking lot and onsite travel lane and approximately 29,605 SF (5%) landscaping on a total of 13.59 gross acres. An 18-space parking area will be constructed on approximately 0.57 acres along Crenshaw Place, adjacent to the project site.

Vehicular access will be maintained at the two (2) existing unsignalized full access driveway on 190th Street (referred to as Project Driveways 2 and 3), and the signalized intersection of 190th Street at Honeywell (referred to as Project Driveway 1), as well as the existing unsignalized full access driveway on Crenshaw Place (referred to as Project Driveway 5). One additional unsignalized driveway, to be located on Crenshaw Place in close proximity to Crenshaw Boulevard, is proposed and will serve as the primary access for the Project's truck-related traffic (referred to as Project Driveway 4). As a Project Design Feature, the Project will widen Crenshaw Place along project frontage from 190th Street north to Project Driveway 4, and also widen 190th Street to construct a westbound right-turn lane at this intersection to facilitate truck access. Figure 2 illustrates the proposed site plan.

PHASING AND TIMING

The proposed project is anticipated to be operational in 2027. The project is anticipated to be built in one phase. Demolition of the existing building already occurred; however, to ensure all impacts have been analyzed, demolition was included in the analysis of construction emissions. Construction is anticipated to start no sooner than October 2025 and be completed by April 2027. The construction schedule utilized in the analysis represents a "worst-case" analysis scenario even if construction was to occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.¹

SENSITIVE RECEPTORS IN PROJECT VICINITY

Those who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities (South Coast Air Quality Management District 2008). Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours.

The nearest sensitive receptors to the project site include the single-family detached residential dwelling units located on the opposite side of Crenshaw Boulevard, as close as approximately 215 feet west of the project site, and 0.31 miles east of the project site. Other air quality sensitive land uses are located further from the project site and would experience lower impacts.

¹ As shown in the California Emissions Estimator Model (CalEEMod) User's Guide Version 2020.4.0, Section 4.3.2 "OFFROAD Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

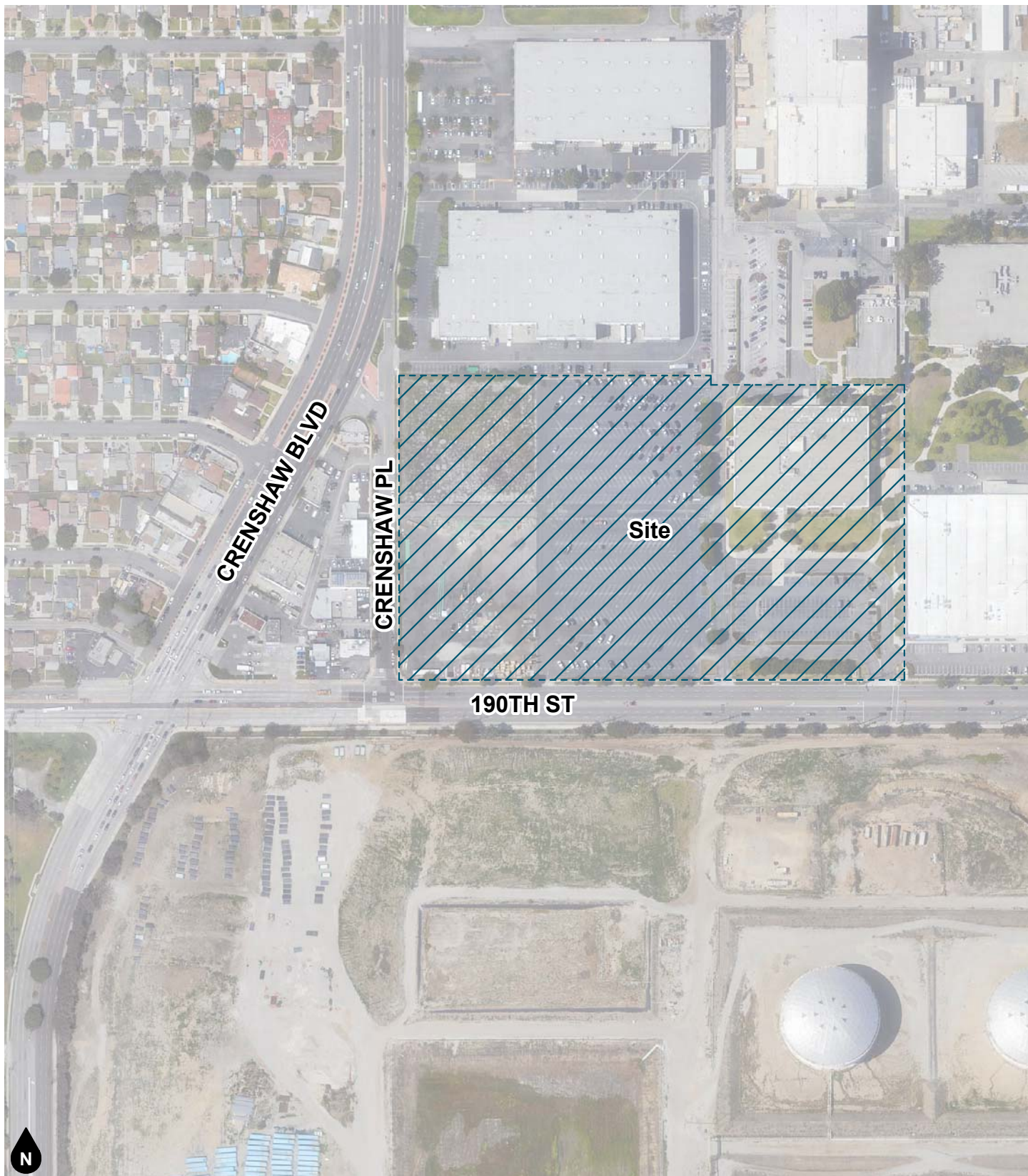
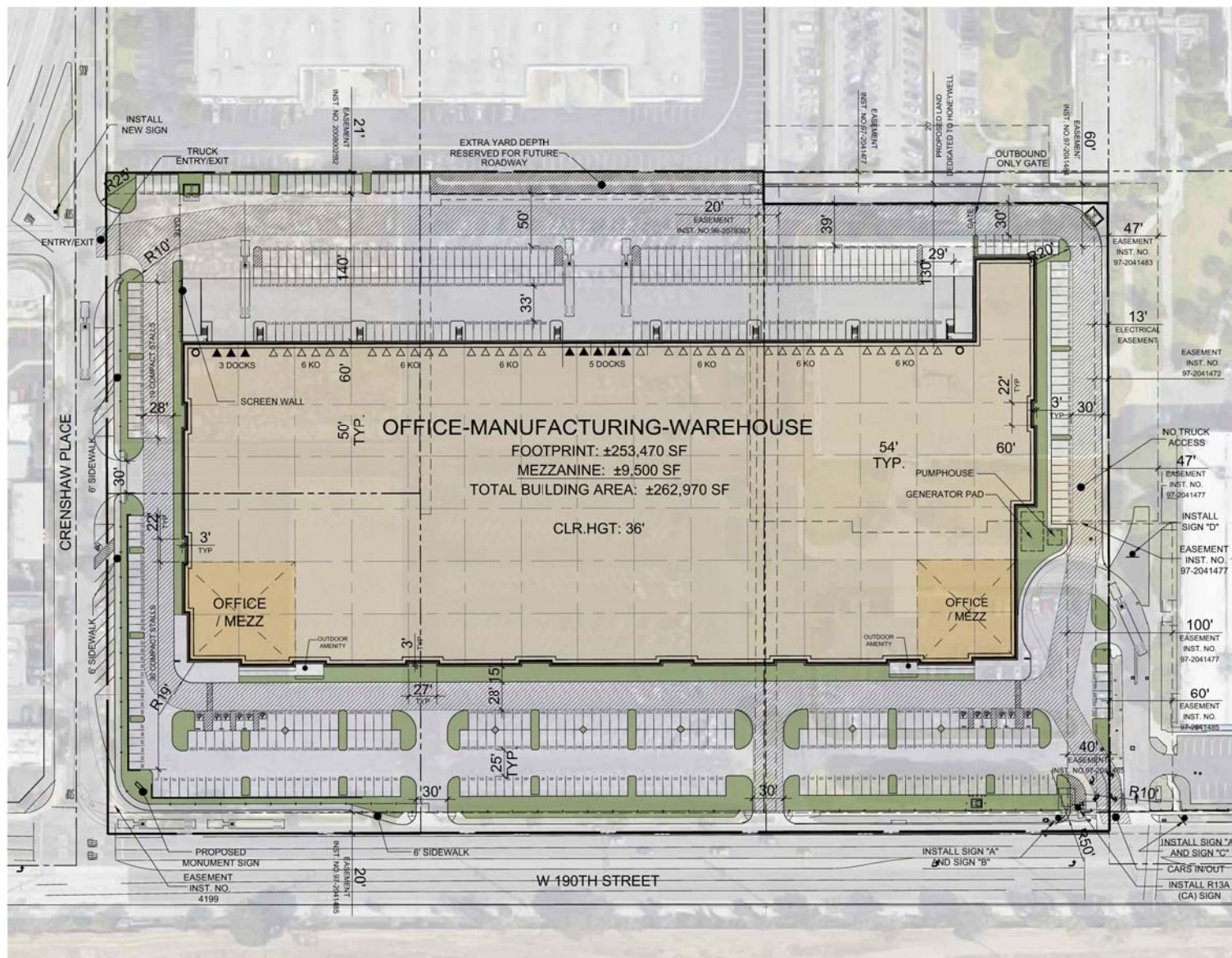


Figure 1
Project Location Map



2. AIR QUALITY ANALYSIS

EXISTING AIR QUALITY CONDITIONS

Local Air Quality

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

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the region form natural horizontal barriers to the dispersion of air contaminants. Air pollution created in the coastal areas and around the Los Angeles area is transported inland until it reaches the mountains where the combination of mountains and inversion layers generally prevent further dispersion. This poor ventilation results in a gradual degradation of air quality from the coastal areas to inland areas. Air stagnation may occur during the early evening and early morning periods of transition between day and nighttime flows. The region also experiences periods of hot, dry winds from the desert, known as Santa Ana winds. If the Santa Ana winds are strong, they can surpass the sea breeze, which blows from the ocean to the land, and carry the suspended dust and pollutants out to the ocean. If the winds are weak, they are opposed by the sea breeze and cause stagnation, resulting in high pollution events.

The annual average temperature varies little throughout much of the basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The majority of the annual rainfall in the basin occurs between November and April. Summer rainfall is minimal and is generally limited to scattered thunderstorms in the coastal regions and slightly heavier showers in the eastern portion of the basin along the coastal side of the mountains. Year-to-year patterns in rainfall are unpredictable because of fluctuations in the weather.

Temperature inversions limit the vertical depth through which pollution can be mixed. Among the most common temperature inversions in the basin are radiation inversions, which form on clear winter nights when cold air off mountains sink to the valley floor while the air aloft over the valley remains warm. These inversions, in conjunction with calm winds, trap pollutants near the source. Other types of temperature inversions that affect the basin include marine, subsidence, and high-pressure inversions.

Summers are often periods of hazy visibility and occasionally unhealthy air. 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. The temperature and precipitation levels for the City of Torrance, are shown below in Table 1.

Table 1
Local Monthly Climate Data

Descriptor	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg. Max. Temperature	65.9	66.5	67.4	69.6	71.6	73.8	77.6	78.6	78	75.4	71.5	66.9
Avg. Min. Temperature	44.3	45.8	47.4	49.9	53.5	56.7	60.2	61.1	59.5	55.4	48.9	45
Avg. Total Precipitation (in.)	3.04	3.23	2.03	0.84	0.18	0.06	0.02	0.06	0.22	0.42	1.31	2.15

Source: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca8973>

Data from the Torrance, CA station (048973).

Pollutants

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.

Criteria Pollutants

The criteria pollutants consist of: ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, lead, and particulate matter. 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.

Nitrogen Dioxides

Nitrogen Oxides (NO_x) is the generic term for a group of highly reactive gases which contain nitrogen and oxygen. While most NO_x are colorless and odorless, concentrations of nitrogen dioxide (NO₂) can often be seen as a reddish-brown layer over many urban areas. NO_x 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. NO_x reacts with other pollutants to form, ground-level ozone, nitrate particles, acid aerosols, as well as NO₂, 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 NO_x is often most effective if done from a regional perspective, rather than focusing on the nearest sources.

Ozone

Ozone (O₃) is not usually emitted directly into the air but at ground-level is created by a chemical reaction between NO_x and volatile organic compounds (VOC) in the presence of sunlight. Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents as well as natural sources emit NO_x 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 NO_x and VOC are ozone precursors, the health effects associated with ozone are also indirect health effects associated with significant levels of NO_x and VOC emissions.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 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 Dioxide

Sulfur Oxide (SOx) gases (including sulfur dioxide [SO₂]) are formed when fuel containing sulfur, such as coal and oil is burned, and 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 (Pb) 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

Particulate matter (PM) is the term for a mixture of solid particles and liquid droplets found in the air. Particulate matter 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) 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 (PM_{2.5}) 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.

Reactive Organic Gases (ROG)

Although not a criteria pollutant, reactive organic gases (ROGs), or volatile organic compounds (VOCs), are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably. Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM₁₀ and lower visibility.

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. Sources of toxic air contaminants 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 forty different toxic air contaminants. The most important of these toxic air contaminants, in terms of health risk, are diesel particulates, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Public exposure to toxic air contaminants can result from emissions from normal operations as well as from accidental releases. Health effects of toxic air contaminants include cancer, birth defects, neurological damage, and death.

Toxic air contaminants 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 toxic air contaminants with varying degrees of toxicity. Sources of toxic air contaminants include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust.

According to the 2013 California Almanac of Emissions and Air Quality, the majority of the estimated health risk from toxic air contaminants can be attributed to relatively few compounds, the most important of which is diesel particulate matter (DPM). Diesel particulate matter is a subset of PM_{2.5} because the size of diesel particles are typically 2.5 microns and smaller. The identification of diesel particulate matter as a toxic air contaminant 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 diesel particulate matter 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 diesel particulate matter as a toxic air contaminant was based on its potential to cause cancer, premature deaths, and other health problems. Exposure to diesel particulate matter is a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. Overall, diesel engine emissions are responsible for the majority of California's potential airborne cancer risk from combustion sources.

Asbestos

Asbestos is listed as a TAC by the ARB and as a Hazardous Air Pollutant 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. Naturally occurring asbestos is not present in Los Angeles County. 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 at Asbestos Mountain, in the San Jacinto Valley, approximately 108 miles southeast of the site. Due to the distance to the nearest natural occurrences of asbestos, the project site is not likely to contain asbestos.

REGULATORY SETTING

The proposed project 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.

Federal – United States Environmental Protection Agency

The United States Environmental Protection Agency (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. The National Ambient Air Quality Standards (NAAQS) pollutants were identified using medical evidence and are shown below in Table 2.

The EPA and the California Air Resource Board (CARB) designate air basins where ambient air quality standards are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified.” National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or ‘form’ of what constitutes attainment, based on specific air quality statistics. For example, the Federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the Federal annual PM_{2.5} standard is met if the three-year average of the annual average PM_{2.5} concentration is less than or equal to the standard. Attainment status is shown in Table 3.

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 State Implementation Plan (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 State Implementation Plan (SIP).

As indicated below in Table 3, the Basin has been designated by the EPA as a non-attainment area for ozone (O₃) and suspended particulates (PM₁₀ and PM_{2.5}). Currently, the Basin is in attainment with the ambient air quality standards for carbon monoxide (CO), lead, sulfur dioxide (SO₂), suspended particulate matter (PM-2.5), and nitrogen dioxide (NO₂).

State – California Air Resources Board

The California Air Resources Board (CARB), which is a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the State Implementation Plan (SIP). The California Ambient Air Quality Standards (CAAQS) for criteria pollutants are shown in Table 2. In addition, the CARB establishes emission standards for motor vehicles sold in California, consumer products (e.g., hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. Furthermore, the motor vehicle emission standards established by CARB include compliance with the Safer Affordable Fuel Efficient Vehicles (SAFE) Rule, issued by NHTSA and EPA in March 2020 (published on April 30, 2020 and effective after June 29, 2020). The SAFE Rule sets fuel economy and carbon dioxide standards that increase 1.5 percent in stringency each year from model years 2021 through 2026, and apply to both passenger cars and light trucks. CARB. It also sets fuel specifications to further reduce vehicular emissions. The SAFE Rule was repealed on December 21, 2021.

The South Coast Air Basin has been designated by the CARB as a nonattainment area for ozone, PM₁₀ and PM_{2.5}. Currently, the South Coast Air Basin is in attainment with the ambient air quality standards for CO, lead, SO₂, NO₂, and sulfates and is unclassified for visibility reducing particles and Hydrogen Sulfide.

On June 20, 2002, the CARB revised the PM10 annual average standard to 20 µg/m³ and established an annual average standard for PM2.5 of 12 µg/m³. These standards were approved by the Office of Administrative Law in June 2003 and are now effective. On September 27, 2007 CARB approved the South Coast Air Basin and the Coachella Valley 2007 Air Quality Management Plan for Attaining the Federal 8-hour Ozone and PM2.5 Standards. The plan projected attainment for the 8-hour Ozone standard by 2024 and the PM2.5 standard by 2015.

On December 12, 2008 the CARB adopted Resolution 08-43, which limits NO_x, 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) or latter emission standards. In the interim period, this regulation provides annual interim targets for fleet owners to meet. This regulation also provides a few exemptions including a onetime per year 3-day pass for trucks registered outside of California.

The CARB is also responsible for regulations pertaining to toxic air contaminants. The Air Toxics “Hot Spots” Information and Assessment Act (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 into the South Coast Air Basin. 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.

AB 617 Nonvehicular air pollution: criteria air pollutants and toxic air contaminants

This bill requires the state board to develop a uniform statewide system of annual reporting of emissions of criteria air pollutants and toxic air contaminants for use by certain categories of stationary sources. The bill requires those stationary sources to report their annual emissions of criteria air pollutants and toxic air contaminants, as specified. This bill required the state board, by October 1, 2018, to prepare a monitoring plan regarding technologies for monitoring criteria air pollutants and toxic air contaminants and the need for and benefits of additional community air monitoring systems, as defined. The bill requires the state board to select, based on the monitoring plan, the highest priority locations in the state for the deployment of community air monitoring systems. The bill requires an air district containing a selected location, by July 1, 2019, to deploy a system in the selected location. The bill would authorize the air district to require a stationary source that emits air pollutants in, or that materially affect, the selected location to deploy a fence-line monitoring system, as defined, or other specified real-time, on-site monitoring. The bill authorizes the state board, by January 1, 2020, and annually thereafter, to select additional locations for the deployment of the systems. The bill would require air districts that have deployed a system to provide to the state board air quality data produced by the system. By increasing the duties of air districts, this bill would impose a state-mandated local program. The bill requires the state board to publish the data on its Internet Web site.

Regional

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

South Coast Air Quality Management District

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.

Air Quality Management Plan

In May 2022, the SCAQMD completed the 2022 Draft AQMP. The 2022 Draft AQMP is focused on attaining the 2015 8-hour ozone standard (70 ppb) for the South Coast Air Basin and Coachella Valley. The Draft 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission technologies, when cost-effective and feasible, and low NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard. The 2022 AQMP was adopted December 2, 2022, by SCAQMD Governing Board. The 2022 AQMP was approved and adopted by CARB on January 26, 2023. The 2022 AQMP strategy includes the following:²

- Wide adoption of zero emissions technologies anywhere available.
- Low NO_x technologies where zero emissions aren't feasible.
- Federal Action.
- Zero emissions technologies for residential and industrial sources such as water and space heaters in buildings and homes regionwide.
- Incentive funding in environmental justice areas.
- Prioritize benefits on the most disadvantaged communities.

SCAQMD Rules and Regulations

During construction and operation, the project must comply with applicable rules and regulations. The following are rules that the project may be required to comply with, either directly, or indirectly:

SCAQMD Rule 402

Prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403

Governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM₁₀ component). Compliance with these rules would reduce impacts on nearby sensitive receptors. Rule 403 measures may include but are not limited to the following:

² SCAQMD 2022 AQMP Infographic. <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2022-aqmp-infographic>

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least three times daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar best management practices shall be provided where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep on-site and off-site streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers.

SCAQMD Rule 445

Prohibits permanently installed wood burning devices into any new development. A wood burning device means any fireplace, wood burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.

SCAQMD Rule 481

Applies to all spray painting and spray coating operations and equipment. The rule states that a person shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

- (1) The spray coating equipment is operated inside a control enclosure, which is approved by the Executive Officer. Any control enclosure for which an application for permit for new construction, alteration, or change of ownership or location is submitted after the date of adoption of this rule shall be exhausted only through filters at a design face velocity not less than 100 feet per minute nor greater than 300 feet per minute, or through a water wash system designed to be equally effective for the purpose of air pollution control.
- (2) Coatings are applied with high-volume low-pressure, electrostatic and/or airless spray equipment.
- (3) An alternative method of coating application or control is used which has effectiveness equal to or greater than the equipment specified in the rule.

SCAQMD Rule 1108

Governs the sale, use, and manufacturing of asphalt and limits the volatile organic compound (VOC) content in asphalt used in the South Coast Air Basin. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the project must comply with SCAQMD Rule 1108.

SCAQMD Rule 1113

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

SCAQMD Rule 1143

Governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

SCAQMD Rule 1186

Limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, state, county, agency or special district such as water, air, sanitation, transit, or school district.

SCAQMD Rule 1303

Governs the permitting of re-located or new major emission sources, requiring Best Available Control Measures and setting significance limits for PM₁₀ among other pollutants.

SCAQMD Rule 1401

New Source Review of Toxic Air Contaminants, specifies limits for maximum individual cancer risk, cancer burden, and non-cancer acute and chronic hazard index from new permit units, relocations, or modifications to existing permit units, which emit toxic air contaminants.

SCAQMD Rule 1403

Asbestos Emissions from Demolition/Renovation Activities, specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM).

SCAQMD Rule 2202

On-Road Motor Vehicle Mitigation Options, is to provide employers with a menu of options to reduce mobile source emissions generated from employee commutes, to comply with federal and state Clean Air Act requirements, Health & Safety Code Section 40458, and Section 182(d)(1)(B) of the federal Clean Air Act. It applies to any employer who employs 250 or more employees on a full or part-time basis at a worksite for a consecutive six-month period calculated as a monthly average.

SCAQMD Rule 2305

The Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program aims to reduce nitrogen oxide and diesel emissions associated with warehouses, help meet federal standards and improve public health. The WAIRE Program is an indirect source rule that regulates warehouse facilities to reduce emissions from the goods movement industry. Owners and operators of warehouses that have 100,000 square feet or more of indoor floor space in a single building must comply with the WAIRE Program. WAIRE is a menu-based point system in which warehouse operators are required to earn a specific number of points every year. The yearly number of points required is based on the number of trucks trips made to and from the warehouse each year, with larger trucks such as tractors or tractor-trailers multiplied by 2.5. Warehouse operators may be exempt from parts of the rule if they operate less than 50,000 square feet of warehousing activities, if the number of points required is less than 10, or if the WAIRE menu action chosen under performs due to circumstances beyond the operator's control, such as a manufacturer defect. SCAQMD Rule 316 establishes fees to fund Rule 2305 compliance activities.

Air Quality Guidance Documents

SCAQMD CEQA Handbook

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 South Coast Air Basin. Instead, this is controlled through local jurisdictions in accordance with the California Environmental Quality Act (CEQA). In order to assist local jurisdictions with air quality compliance issues the CEQA Air Quality Handbook (SCAQMD CEQA Handbook) prepared by the 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 of the AQMP. 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 the 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. SCAQMD is in the process of developing an "Air Quality Analysis Guidance Handbook" to replace the CEQA Air Quality Handbook approved by the AQMD Governing Board in 1993. The 1993 CEQA Air Quality Handbook is still available but not online. In addition, there are sections of the 1993 Handbook that are obsolete. In order to assist the CEQA practitioner in conducting an air quality analysis while the new Handbook is being prepared, supplemental information regarding: significance thresholds and analysis, emissions factors, cumulative impacts emissions analysis, and other useful subjects, are available at the SCAQMD website.³ The SCAQMD CEQA Handbook and supplemental information is used in this analysis.

Southern California Association of Governments

The SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the Federally designated 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 Regional Transportation Plan and Regional Transportation Improvement Plan (RTIP), which addresses regional development and growth forecasts. 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 Regional Transportation Plan, Regional Transportation Improvement Plan, and AQMP are based on projections originating within the City and County General Plans.

On April 7, 2016, SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS or Plan). The Plan is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The Plan charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It outlines more than \$556.5 billion in transportation system investments through 2040. The Plan was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura. In June 2016, SCAG received its conformity determination from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) indicating that all air quality conformity requirements for the 2016 RTP/SCS and associated 2015 FTIP Consistency Amendment through Amendment 15-12 have been met.

On September 3, 2020, SCAG's Regional Council unanimously voted to approve and fully adopt Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy), and the addendum to the Connect SoCal Program Environmental Impact Report. Connect SoCal is a long-range visioning plan that

³ <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>.

builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal outlines more than \$638 billion in transportation system investments through 2045. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

Local – City of Torrance

Local jurisdictions, such as the City of Torrance, 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 2022 AQMP. 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.

The City relies on the expertise of the SCAQMD and utilizes the SCAQMD CEQA Air Quality Handbook as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

The Community Resources Element of the City of Torrance General Plan contains the following air quality-related objectives and policies that are applicable to the proposed project:

Objective CR.13 To contribute to the improvement of local and regional ambient air quality to benefit the health of all.

Policies

- CR.13.1 Continue to participate in the efforts of the State Air Resources Board and the South Coast Air Quality Management District to meet State and federal air quality standards.
- CR.13.2 Work with neighboring cities to implement local and regional projects that improve mobility on freeways and railways, reduce emissions, and improve air quality.
- CR.13.3 Support regional air quality goals through conscientious land use and transportation planning and the implementation of resource conservation measures.
- CR.13.4 Balance the achievement of clean air with other major goals of the City.
- CR.13.5 Support air quality and energy and resource conservation by encouraging alternative modes of transportation such as walking, bicycling, transit, and carpooling.
- CR.13.6 Promote citizen awareness and participation in programs to reduce air pollution and traffic congestion.
- CR.13.7 Encourage the use of alternative fuel vehicles and re-refined oil.
- CR.13.8 Promote energy-efficient building construction and operation practices that reduce emissions and improve air quality.

Objective CR.14 To reduce the City's overall carbon footprint and counteract the effects of global warming through a reduction in the emissions of greenhouse gases within Torrance.

- CR14.1 Support the California Air Resources Board in its ongoing plans to implement AB32, and fully follow any new AB32-related regulations.
- CR.14.2 Develop and implement greenhouse gas emissions reduction measures, including discrete, early-action greenhouse gas reducing measures that are technologically feasible and cost-effective.
- CR.14.3 Pursue actions recommended in the U.S. Mayors Climate Protection Agreement to meet AB32 requirements.
- CR.14.4 Act as a leader and example in sustainability and reduction in greenhouse gas emissions by conducting City business in the most greenhouse gas-sensitive way.

Table 2
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) Decline in pulmonary function and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; and (f) Property damage.
Carbon Monoxide (CO)	20.0 ppm/1-hour 9.0 ppm/8-hour	35.0 ppm/1-hour 9.0 ppm/8-hour	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and (d) Possible increased risk to fetuses.
Nitrogen Dioxide (NO ₂)	0.18 ppm/1-hour 0.03 ppm/annual	100 ppb/1-hour 0.053 ppm/annual	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (c) Contribution to atmospheric discoloration.
Sulfur Dioxide (SO ₂)	0.25 ppm/1-hour 0.04 ppm/24-hour	75 ppb/1-hour 0.14 ppm/annual	(a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma.
Suspended Particulate Matter (PM ₁₀)	50 µg/m ³ /24-hour 20 µg/m ³ /annual	150 µg/m ³ /24-hour	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; (c) Increased risk of premature death from heart or lung diseases in elderly.
Suspended Particulate Matter (PM _{2.5})	12 µg/m ³ / annual	35 µg/m ³ /24-hour 9 µg/m ³ /annual	
Sulfates	25 µg/m ³ /24-hour	No Federal Standards	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; (f) 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 conduction.
Visibility Reducing Particles	Extinction coefficient of 0.23 per kilometer-visibility of 10 miles or more due to particles when humidity is less than 70 percent.	No Federal Standards	Visibility impairment on days when relative humidity is less than 70 percent.

Source: <https://ww2.arb.ca.gov/resources/background-air-quality-standards>

Table 3
South Coast Air Basin Attainment Status

Pollutant	State Status	National Status
Ozone	Nonattainment	Nonattainment (Extreme)
Carbon monoxide	Attainment	Maintenance (Serious)
Nitrogen dioxide	Attainment	Maintenance (Primary)
Sulfur dioxide	Attainment	Attainment/Unclassified
PM10	Nonattainment	Maintenance (Serious)
PM2.5	Nonattainment	Nonattainment (Moderate)

Source: (Federal and State Status):<https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>

MONITORED 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 Basin provided in the Final 2022 Air Quality Management Plan prepared by SCAQMD (December 2022) indicate that collectively, mobile sources account for 46 percent of the VOC, 85 percent of the NO_x emissions, 89 percent of the CO emissions and 29 percent of directly emitted PM_{2.5}, with another 18 percent of PM_{2.5} from road dust.

The SCAQMD has divided the South Coast Air Basin into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The project site is located in the Southwest Coastal LA County Air Monitoring Area (Area 3), which is located in Los Angeles County and covers from the area from the Pacific Ocean on the west, the Interstate 110 Freeway on the east, Slauson Avenue on the north, and San Pedro on the south. The nearest air monitoring station to the project site is the Long Beach – 2425 Webster Street Monitoring Station (Long Beach Station). The Long Beach Station is located approximately 7.11 miles southeast of the project site at 2425 Webster Street, Long Beach. As not all monitoring stations monitor all pollutants, data was also taken from the next nearest monitoring station, Compton – 700 North Bullis Road Monitoring Station (Compton Station). The Compton Station is located approximately 7.27 miles northeast of the project site at 700 North Bullis Road, Compton. Table 4 presents the monitored pollutant levels from the Long Beach and Compton Stations. However, it should be noted that due to the air monitoring stations distances from the project site, recorded air pollution levels at the air monitoring stations reflect with varying degrees of accuracy, local air quality conditions at the project site.

Table 4 summarizes 2021 through 2023 published monitoring data, which is the most recent 3-year period available. The data shows that during the past few years; the project area has exceeded the ozone and particulate matter (PM_{2.5} and PM₁₀) standards.

Ozone

During the 2021 to 2023 monitoring period, the State 1-hour concentration standard for ozone was exceeded one day in 2022 at the Compton Station. The both the Federal and State 8-hour ozone standard was exceeded for one day each year over the past three years at the Compton 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 NO₂, 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 the SCAQMD contribute to the ozone levels experienced at the monitoring station, with the more significant areas being those directly upwind.

Carbon Monoxide

CO is another important pollutant that is due mainly to motor vehicles. The Long Beach Station did not record an exceedance of the state or federal 8-hour CO standard for the last three years.

Nitrogen Dioxide

The Compton Station did not record an exceedance of the State or Federal NO₂ standards for the last three years.

Particulate Matter

The State 24-hour concentration standards for PM₁₀ were exceeded for three days in 2022, over the last three years at the Long Beach Station. Over the past three years, the Federal 24-hour standards for PM₁₀ were not exceeded.

The Federal 24-hour standard for PM_{2.5} were exceeded 12 days in 2021, six days in 2022, and two days in 2023, over the past three years at the Compton Station.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM₁₀ and PM_{2.5}). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM₁₀ and PM_{2.5}. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive, because many breathe through their mouths during exercise.

Table 4
Air Quality Monitoring Summary

Pollutant (Standard) ¹		Year		
		2021	2022	2023
Ozone:	Maximum 1-Hour Concentration (ppm)	0.085	0.111	0.084
	Days > CAAQS (0.09 ppm)	0	1	0
	Maximum 8-Hour Concentration (ppm)	0.076	0.085	0.071
	Days > NAAQS (0.070 ppm)	1	1	1
	Days > CAAQS (0.070 ppm)	1	1	1
Carbon Monoxide: ²	Maximum 8-Hour Concentration (ppm)	*	*	*
	Days > CAAQS (9 ppm)	0	0	0
	Days > NAAQS (9 ppm)	0	0	0
Nitrogen Dioxide:	Maximum 1-Hour Concentration (ppm)	0.068	0.065	0.053
	Days > CAAQS (0.18 ppm)	0	0	0
Inhalable Particulates (PM10): ²	Maximum 24-Hour Concentration (µg/m ³)	*	128.6	148.6
	Days > NAAQS (150 µg/m ³)	0	0	0
	Days > CAAQS (50 µg/m ³)	*	3	*
	Annual Average (µg/m ³)	*	34.9	33.9
Ultra-Fine Particulates (PM2.5):	Maximum 24-Hour Concentration (µg/m ³)	102.1	52.8	54.6
	Days > NAAQS (35 µg/m ³)	12	6	2
	Annual Average (µg/m ³)	13.4	12.1	11.1

Notes:

Source: <http://www.arb.ca.gov/adam/topfour/topfour1.php>. Data from the Compton - 700 North Bullis Road Monitoring Station, unless otherwise noted.

(1) CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million

* Means there was insufficient data available to determine value.

AIR QUALITY STANDARDS

Significance Thresholds

Appendix G of the State CEQA Guidelines

Appendix G of the State CEQA Guidelines states that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make a significance determination. Pursuant to Appendix G, the project would result in a significant impact related to air quality if it would:

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

The CEQA Guidelines Section 15064.7 provides the significance criteria established by the applicable air quality management district or air pollution control district, when available, may be relied upon to make determinations of significance. The potential air quality impacts of the project are, therefore, evaluated according to thresholds developed by SCAQMD in their CEQA Air Quality Handbook, Air Quality Analysis Guidance Handbook, and subsequent guidance, which are listed below.⁴ Therefore, the project would result in a potentially significant impact to air quality if it would:

AIR-1: Conflict with or obstruct the implementation of the applicable air quality plan;

AIR-2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation as a result of:

- Criteria pollutant emissions during construction (direct and indirect) in excess of the SCAQMD's regional significance thresholds,
- Criteria pollutant emissions during operation (direct and indirect) in excess of the SCAQMD's regional significance thresholds.

AIR-3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

AIR-4: Expose sensitive receptors to substantial pollutant concentrations that would:

- Exceed SCAQMD's localized significance thresholds,
- Cause or contribute to the formation of CO hotspots.

AIR-5: Create objectionable odors affecting a substantial number of people.

The SCAQMD is in the process of developing an Air Quality Analysis Guidance Handbook to replace the CEQA Air Quality Handbook. In the interim, supplemental guidance has been adopted by the SCAQMD. The

⁴ While the SCAQMD CEQA Air Quality Handbook contains significance thresholds for lead, Project construction and operation would not include sources of lead emissions and would not exceed the established thresholds for lead. Unleaded fuel and unleaded paints have virtually eliminated lead emissions from industrial land use projects such as the Project. As a result, lead emissions are not further evaluated herein.

potential air quality impacts of the project are, therefore, evaluated according to numeric indicators developed by the SCAQMD in the CEQA Air Quality Handbook and supplemental guidance from the SCAQMD.⁵

Regional Air Quality

Many air quality impacts that derive from dispersed mobile sources, which are the dominate pollution generators in the 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 South Coast 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 5.

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 South Coast Air Basin. In order to assess local air quality impacts the SCAQMD has developed Localized Significance 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), June 2003 (revised July 2008), which details the methodology to analyze local air emission impacts. The Localized Significance Threshold Methodology found that the primary emissions of concern are NO₂, CO, PM₁₀, and PM_{2.5}.

The significance thresholds for the local emissions of NO₂ and CO are determined by subtracting the highest background concentration from the last three years of these pollutants from Table 4 above, from the most restrictive ambient air quality standards for these pollutants that are outlined in the Localized Significance Thresholds. Table 5 shows the ambient air quality standards for NO₂, CO, and PM₁₀ and PM_{2.5}.

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 hazardous air pollutants (HAP), the Health Risk Assessment Guidance for analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, (Diesel Analysis) prepared by SCAQMD (August 2003) recommends that if the proposed project is anticipated to create hazardous air pollutants 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 hazardous air pollutants and the toxicity of the hazardous air pollutants should be analyzed through a comprehensive facility-wide health risk assessment (HRA).

⁵ While the SCAQMD CEQA Air Quality Handbook contains significance thresholds for lead, Project construction and operation would not include sources of lead emissions and would not exceed the established thresholds for lead. Unleaded fuel and unleaded paints have virtually eliminated lead emissions from residential land use projects such as the Project. As a result, lead emissions are not further evaluated herein.

As determined in the *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369 (CBIA) case the California Supreme Court determined that CEQA does not generally require an impact analysis of the existing environmental conditions on the future residents of a proposed project and generally only requires an analysis of the proposed project's impact on the environment. However, the CBIA case also stated that when a proposed project brings development and people into an area already subject to specific hazards and the new development/people exacerbate the existing hazards, then CEQA requires an analysis of the hazards and the proposed project's effect in terms of increasing the risks related to those hazards. In regard to air quality hazards, TACs are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. As such, if a proposed project would not exacerbate pre-existing hazards (e.g., TAC health risks) then an analysis of those hazards and the proposed project's effect on increasing those hazards is not required.

However, the project is an industrial project and will be a source of toxic air contaminants; therefore, an operational HRA was conducted (please see Section 3 of this report).

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.

Table 5
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds		
Pollutant	Construction (lbs/day)	Operation (lbs/day)
NOx	100	55
VOC	75	55
PM10	150	150
PM2.5	55	55
SOx	150	150
CO	550	550
Lead	3	3
Toxic Air Contaminants, Odor and GHG Thresholds		
TACs	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index > 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO2e for industrial projects	
Ambient Air Quality Standards		
Pollutant	SCAQMD Standards	
NO2 -1-hour average	0.18 ppm (338 µg/m^3)	
PM10 -24-hour average		
Construction	10.4 µg/m^3	
Operations	2.5 µg/m^3	
PM2.5 -24-hour average		
Construction	10.4 µg/m^3	
Operations	2.5 µg/m^3	
SO2		
1-hour average	0.25 ppm	
24-hour average	0.04 ppm	
CO		
1-hour average	20 ppm (23,000 µg/m^3)	
8-hour average	9 ppm (10,000 µg/m^3)	
Lead		
30-day average	1.5 µg/m^3	
Rolling 3-month average	0.15 µg/m^3	
Quarterly average	1.5 µg/m^3	

Source: https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=f7601d61_25

SHORT-TERM CONSTRUCTION EMISSIONS

Construction activities associated with the proposed project would have the potential to generate air emissions, toxic air contaminant emissions, and odor impacts. Assumptions for the phasing, duration, and required equipment for the construction of the proposed project were obtained from the project applicant.

As stated previously, demolition of the building has already occurred; however, it is included in this analysis in order to be complete and to fully analyze the impacts from the construction of the project.

The construction activities for the proposed project are anticipated to include: demolition of an approximately 162,504 square foot (SF) existing building and approximately 475,800 SF of asphalt paving (totaling 10,686.864 tons of debris); grading of approximately 13.59 acres; construction of 78,891 square feet of warehouse, 157,782 square feet of manufacturing, 26,297 square feet of office use, and approximately 29,605 SF (5%) of landscaping; paving of a parking lot with 552 parking spaces; and application of architectural coatings. The project also includes the construction of an 18-space parking area on approximately 0.57 acres along Crenshaw Place. See Appendix B for more details.

The proposed project is anticipated to start demolition no sooner than October 2025 and construction is anticipated to be completed by April 2027. The project is anticipated to be operational in 2027. The grading phase is to include approximately 19,506 cubic yards of import.

Methodology

The following provides a discussion of the methodology used to calculate regional construction air emissions and an analysis of the proposed project's short-term construction emissions for the criteria pollutants. The construction-related regional air quality impacts have been analyzed for both criteria pollutants and GHGs.

Emissions are estimated using the CalEEMod (Version 2022.1.1.29) software, which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California and is recommended by the SCAQMD.⁶

Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The input values used in this analysis were adjusted to be project-specific for the construction schedule and the equipment used was based on CalEEMod defaults. The CalEEMod program uses the EMFAC2021 computer program to calculate the emission rates specific for the southern portion of Los Angeles County for construction-related employee vehicle trips and the OFFROAD2017 computer program to calculate emission rates for heavy truck operations. EMFAC2021 and OFFROAD2017 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. Daily truck trips and CalEEMod default trip length data were used to assess roadway emissions from truck exhaust. The maximum daily emissions are estimated values for the worst-case day and do not represent the emissions that would occur for every day of project construction. The maximum daily emissions are compared to the SCAQMD daily regional numeric indicators. Detailed construction equipment lists, construction scheduling, and emission calculations are provided in Appendix B.

⁶ South Coast Air Quality Management District, California Emissions Estimator Model, <http://www.aqmd.gov/caleemod/>.

The project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the Project area (approximately 13.59 acres) a Fugitive Dust Control Plan or Large Operation Notification would not be required.

SCAQMD's Rule 403 minimum requirements require that the application of the best available dust control measures is used for all grading operations and include the application of water or other soil stabilizers in sufficient quantity to prevent the generation of visible dust plumes. Compliance with Rule 403 would require the use of water trucks during all phases where earth moving operations would occur. Compliance with Rule 403 has been included in the CalEEMod modeling for the proposed project.

Per SCAQMD Rule 1113 as amended on June 3, 2011, the architectural coatings that would be applied after January 1, 2014 will be limited to an average of 50 grams per liter or less. CalEEMod defaults have been adjusted accordingly.

The phases of the construction activities which have been analyzed below for each phase are: (1) demolition, (2) grading, (3) building construction, (4) paving, and (5) application of architectural coatings. Details pertaining to the project's construction timing and the type of equipment modeled for each construction phase are available in the CalEEMod output in Appendix B.

Construction-Related Regional Impacts

The construction-related criteria pollutant emissions for each phase are shown below in Table 6. Table 6 shows that none of the project's maximum daily emissions will exceed regional thresholds. Therefore, a less than significant regional air quality impact would occur from construction of the proposed project.

Construction-Related Local Impacts

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin. The proposed project has been analyzed for the potential local air quality impacts created from: construction-related fugitive dust and diesel emissions; from toxic air contaminants; and from construction-related odor impacts.

Local Air Quality Impacts from Construction

The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (South Coast Air Quality Management District 2011b). CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. In order to compare CalEEMod reported emissions against the localized significance threshold lookup tables, the CEQA document should contain the following parameters:

- (1) The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.
- (2) The maximum number of acres disturbed on the peak day.
- (3) Any emission control devices added onto off-road equipment.
- (4) Specific dust suppression techniques used on the day of construction activity with maximum emissions.

The CalEEMod output in Appendix B show the equipment used for this analysis.

As shown in Table 7, the maximum number of acres disturbed in a day would be 4 acres during grading. The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in Localized Significance Threshold Methodology prepared by SCAQMD (revised July 2008). 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. The emission thresholds were calculated based on the Southwest Coastal LA County source receptor area (SRA) 3 and, to be conservative, a disturbance value of two acres per day. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. The nearest sensitive receptors to the project site are the existing single-family detached residential dwelling units located as close as approximately 215 feet west (~66 meters) of the project site; therefore, to be conservative, the SCAQMD Look-up Tables for 50 meters was used. Table 8 shows the on-site emissions from the CalEEMod model for the different construction phases and the LST emissions thresholds.

The data provided in Table 8 shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds at the nearest sensitive receptors. Therefore, a less than significant local air quality impact would occur from construction of the proposed project.

Construction-Related Human Health Impacts

Regarding health effects related to criteria pollutant emissions, the applicable significance thresholds are established for regional compliance with the state and federal ambient air quality standards, which are intended to protect public health from both acute and long-term health impacts, depending on the potential effects of the pollutant. Because regional and local emissions of criteria pollutants during construction of the project would be below the applicable thresholds, it would not contribute to long-term health impacts related to nonattainment of the ambient air quality standards. Therefore, significant adverse acute health impacts as a result of project construction are not anticipated. However, in the interest of full disclosure of all impacts, a Construction Health Risk Assessment was conducted for the project and is available under the cover of a separate report.

Construction-Related Toxic Air Contaminant Impacts

The greatest potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during construction of the proposed project. According to the Office of Environmental Health Hazard Assessment (OEHHA)⁷ and the SCAQMD *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (August 2003),⁸ health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 30-year) resident exposure duration. Given the temporary and short-term construction schedule (approximately 14 months), the project would not result in a long-term (i.e., lifetime or 30-year) exposure as a result of project construction. Furthermore, construction-based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds.

The project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction. The project would

⁷ Office of Environmental Health Hazard Assessment, Air Toxic Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessment, February 2015, <https://oehha.ca.gov/media/downloads/crnrr/2015guidancemanual.pdf>.

⁸ South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003, <http://www.aqmd.gov/docs/default-source/ceqa/handbook/mobile-source-toxics-analysis.doc?sfvrsn=2>.

also comply with the requirements of SCAQMD Rule 1403 if asbestos is found during the renovation and construction activities. Therefore, impacts from TACs during construction would be considered less than significant.

However, in the interest of full disclosure of all potential impacts, a Construction Health Risk Assessment was conducted by Ganddini for the project and is available in the following report; 190th Street Warehouse Project Construction Health Risk Assessment, September 8, 2022 (Updated August 18, 2025). This report showed that the existing sensitive receptors, within the vicinity of the proposed 190th Street Warehouse project, would not be exposed to a cancer risk in excess of 10 in million from construction of the project. Impacts are considered to be less than significant. The construction-related health risk impacts for non-cancer related impacts are less than 1.0; therefore, they are also considered to be less significant. No mitigation is required.

Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the construction process are of short-term in nature and the odor emissions are expected to cease upon the drying or hardening of the odor producing materials. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the proposed project. Diesel exhaust and VOCs would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore should not reach an objectionable level at the nearest sensitive receptors.

Table 6
Construction-Related Regional Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	ROG	NOx	CO	SO ₂	PM10	PM2.5
Maximum Daily Emissions ^{1,2,3}	35.99	36.96	32.21	0.10	6.23	2.63
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

Notes:

Source: CalEEMod Version 2022.1

- (1) On-site emissions from equipment operated on-site that is not operated on public roads. On-site grading PM-10 and PM-2.5 emissions show compliance with SCAQMD Rule 403.
- (2) Construction, painting and paving phases may overlap.
- (3) Architectural coating emissions include compliance with SCAQMD Rule 1113 limiting architectural coatings to 50 g/L VOC for buildings and 100 g/L VOC for parking lot striping.

Table 7
Maximum Number of Acres Disturbed Per Day

Activity	Equipment	Number	Acres/8hr-day	Total Acres
Demolition	Rubber Tired Dozers	2	0.5	1
Total for phase	-	-	-	1
Grading	Rubber Tired Dozers	1	0.5	0.5
	Graders	1	0.5	0.5
	Scrapers	2	1	2
	Crawler Tractors ¹	2	0.5	1
Total for phase		-	-	4

Notes:

Source: South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2011b.

(1) Tractor/loader/backhoe is a suitable surrogate for a crawler tractor per SCAQMD staff.

Table 8
Local Construction Emissions at the Nearest Receptors

Activity ¹	On-Site Pollutant Emissions (pounds/day) ²			
	NOx	CO	PM10	PM2.5
Demolition	22.20	19.92	4.73	1.42
Grading	29.68	28.31	3.64	2.09
Building Construction	9.85	12.97	0.38	0.35
Paving	6.94	9.95	0.30	0.27
Architectural Coating	0.83	1.13	0.02	0.02
SCAQMD Thresholds ³	128	1,158	23	7
Exceeds Threshold?	No	No	No	No

Notes:

- (1) The project will disturb up to a maximum of 4 acres a day during grading (see Table 7).
- (2) Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2 acre, to be conservative, at a distance of 50 meters in SRA 3 Southwest Coastal LA County.
- (3) The nearest sensitive receptors are the existing single-family detached residential dwelling units located as close as approximately 215 feet (~66 meters) west of the project site; therefore, to be conservative, the 50 meter threshold was used.

LONG-TERM OPERATIONAL EMISSIONS

The on-going operation of the proposed project would result in a long-term increase in air quality emissions. This increase would be due to emissions from the project-generated vehicle trips, onsite emissions sources, and through operational emissions 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 Air Quality Impacts

The potential operations-related air emissions have been analyzed below for the criteria pollutants and cumulative impacts.

Operations-Related Criteria Pollutants Analysis

The operations-related criteria air quality impacts created by the proposed project have been analyzed through the use of the CalEEMod model. The operating emissions were based on the year 2027 per the information provided by the project developer.⁹ The operations emissions printouts from the CalEEMod model are provided in Appendix B. The CalEEMod analyzes operational emissions from area sources, energy usage, and mobile sources, which are discussed below.

Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project have been analyzed by inputting the project-generated vehicular trips (trip generation rate) from the Revised Local Circulation Analysis 2555 W. 190th Street Warehouse/Manufacturing Project (February 6, 2025 [Original date July 27, 2022])(TIA) and the trip counts from the Trip Generation Assessment for 2555 W. 190th Street Warehouse Development Project (TGA) prepared by Linscott Law & Greenspan Engineers (August 6, 2025) into the CalEEMod Model. Per the TGA, the project is expected to generate approximately 1,169 (non-passenger car equivalents [PCE]) vehicle trips per day from the warehouse, manufacturing and office uses. Trip generation rates from the TIA included 4.75 trips per thousand square foot per day for the manufacturing use, 1.71 trips per thousand square foot per day for the warehouse use, and 10.84 trips per thousand square foot per day for the office use. As the TIA did not provide weekend trip rates, the Saturday trip generation rate of 2.21 trips per thousand square foot and Sunday trip generation rate of 0.7 trips per thousand square foot for the office use, the Saturday trip generation rate of 0.15 trips per thousand square foot and Sunday trip generation rate of 0.04 trips per thousand square foot for the warehouse, and the Saturday trip generation rate of 1.49 trips per thousand square foot and Sunday trip generation rate of 0.99 trips per thousand square foot for the manufacturing were utilized from the Institute of Transportation Engineers (ITE) 11th edition Trip Generation Manual (2021). The program then applies the emission factors for each trip which is provided by the EMFAC2021 model to determine the vehicular traffic pollutant emissions.

The warehouse and manufacturing use vehicle mix were changed in CalEEMod to match the traffic mix percentages given in the TIA (see Tables 9 and 10) and the percentages in CalEEMod for the warehouse and manufacturing uses were changed to 79.5% autos (H-W) and 20.5% trucks (W-O) to match the overall vehicle percentages given in the TIA. Due to the proposed project's location and proposed warehouse land use, the average customer-based trip length was increased to 40 miles per SCAQMD recommendation, while all other trip lengths were based on the urban default values.

⁹ The opening year per the Revised Local Circulation Analysis 2555 W. 190th Street Warehouse/Manufacturing Project (TIA) prepared by Linscott Law & Greenspan Engineers (February 6, 2025 [Original date July 27, 2022]) for the proposed project is 2024; however, as that year has passed, this analysis uses the operational year of 2027 provided by the developer.

Area Sources

Per the CAPCOA Appendix A Calculation Details for CalEEMod, area sources include emissions from consumer products, landscape equipment and architectural coatings. Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors, generators, and pumps. As specifics were not known about the landscaping equipment fleet, CalEEMod defaults were used to estimate emissions from landscaping equipment. No changes were made to the default area source parameters.

Energy Usage

Energy usage includes emissions from the generation of electricity and natural gas used on-site. No changes were made to the default energy usage parameters.

Offroad Sources

According to the SCAQMD *High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results* (June, 2014), warehouses will utilize an average of 0.12 pallet jacks/forklifts per thousand square feet of building area and 3.6 hostlers (yard goats) per million square feet of building area. Based on this data, the total square footage of the project, and input from the developer as to the fuel type for the equipment, offroad sources include emissions from the use of five electric forklifts, 6 hours a day, 5 days a week and one, 200 HP diesel yard goat run for 4 hours a day, 5 days a week.

Stationary Sources

According to a project-specific *Preliminary Fire pump and Generator Sizing* evaluation conducted by RTM Engineering Consultants on May 29, 2025 (see Appendix B), a worst-case scenario for fire protection would require a 745 HP 500-kW standby generator and 2,000 GPM at 150 PSI with a 300 HP motor and 10 HP jockey pump. According to the National Fire Protection Association, diesel fire pumps must be tested on a weekly basis for a minimum of 30 minutes. According to the NFPA 110, emergency back-up generators need to be tested monthly for 30 minutes or more. Therefore, stationary sources include emissions from the occasional use/testing of a 745 HP emergency back-up diesel generator run for 0.5 hours per day, 12 hours a year, and 300 HP diesel emergency fire pump with 10 HP jockey pump run for 0.5 hours per day, 26 hours a year.

Project Impacts

The worst-case summer or winter maximum daily criteria pollutant emissions created from the proposed project's long-term operations have been calculated and are shown below in Table 11. Table 11 shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds. Therefore, a less than significant regional air quality impact would occur from operation of the proposed project.

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 South Coast 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 analysis analyzes the vehicular CO emissions, local impacts from on-site operations per SCAQMD LST methodology, and odor impacts.

Local CO Emission 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 which were presented above.

To determine if the proposed project could cause emission levels in excess of the CO standards discussed above, a sensitivity analysis is typically conducted to determine the potential for CO “hot spots” at a number of intersections in the general project vicinity. Because of reduced speeds and vehicle queuing, “hot spots” potentially can occur at high traffic volume intersections with a Level of Service E or worse.

The analysis prepared for CO attainment in the South Coast Air Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the South Coast Air Basin. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the South Coast Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and air quality management plans. In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: South Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. The Los Angeles County Metropolitan Transportation Authority evaluated the Level of Service in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be Level of Service E during the morning peak hour and Level of Service F during the afternoon peak hour.

Per the TGA, the proposed project would generate a maximum of approximately 1,169 vehicle trips per weekday (non-PCE). The TIA showed that intersection with the highest traffic volume is located at Crenshaw Boulevard and Crenshaw Place and has an Existing with Ambient Growth (Year 2024) with Project PM peak hour volume of 2,298 vehicles which would generate an ADT of 22,980. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. Therefore, as both the intersection and ADT volumes fall far short of 100,000 vehicles per day, no CO “hot spot” modeling was performed and no significant long-term air quality impact is anticipated to local air quality with the on-going use of the proposed project.

Local Air Quality Impacts from On-Site Operations

Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, on-site usage of natural gas appliances as well as the operation of vehicles on-site 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 South Coast Air Basin. The nearest sensitive receptors that may be impacted by the proposed project are the existing single-family detached residential dwelling units located approximately 215 feet west of the project site.

The local air quality emissions from on-site operations were analyzed according to the methodology described in Localized Significance Threshold Methodology, prepared by SCAQMD, revised July 2008. 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. Per

SCAQMD staff, the 5-acre Look-up Table, which is the largest site available, can be used as a conservative screening analysis for on-site operational emissions to determine whether more-detailed dispersion modeling would be necessary. The proposed project was analyzed based on the Southwest Coastal LA County source receptor area (SRA) 3 and used the thresholds for a five-acre project site.

Table 12 shows the on-site emissions from the CalEEMod model that includes natural gas usage, landscape maintenance equipment, and vehicles operating on-site and the calculated emissions thresholds. Per LST methodology, mobile emissions include only on-site sources which equate to less than 10 percent of the project-related new mobile sources.¹⁰ The data provided in Table 12 shows that the on-going unmitigated operations of the proposed project would not exceed SCAQMD local operational thresholds of significance discussed above.

However, as the project site is larger than 5 acres, per SCAQMD current requirements, the potential for operational LST exceedances has been analyzed using the AERMOD dispersion model. In order to ensure that the worst-case scenario for this project was modeled, the maximum emissions for NO_x and CO from Table 11 were used as the year-round emission factor for the project. These emissions, derived from the CalEEMod output, represent the onsite stationary sources, onsite offroad vehicle emissions and vehicle emissions calculated from all project-related traffic traveling on local roadways to access the project-site, i.e., total vehicle emissions and area source emissions operating on the project site. The use of these regional vehicle emissions for the NO_x and CO calculations overestimates project impacts. However, the following analysis for NO_x and CO emissions shows that the incorporation of these regional vehicle emissions still results in localized concentrations below the applicable thresholds.

NO_x

The maximum 1-hour NO₂ concentration from the Compton Monitoring Station (SRA 3) in the last 3 years was 0.068 ppm. The AAQS for NO₂ is a 1-hour maximum concentration of 0.18 ppm. Therefore, the difference in concentrations is 0.112 ppm (211.56 µg/m³) and the project will have significant air quality impacts if NO₂ concentrations at the nearest sensitive receptor exceed this amount. However, NO_x emissions are simulated in the air quality dispersion model and the NO₂ conversion rate is treated by an NO₂-to-NO_x ratio, which is a function of downwind distance.

Per LST modeling guidance, in order to model the mobile source emissions from cars and trucks at the project site for long-term operational emissions, the on-site roadways were treated as line volume sources. The emissions from the onsite offroad equipment (five electric forklifts and one diesel yard goat), emergency fire pump and emergency backup generator were also included in the line volume source as the emissions would be sourced from the building onsite. The input parameters used in the modeling are included in Appendix B.

According to the LST methodology developed by staff at SCAQMD, at 5,000 meters downwind, 100 percent conversion of NO₂-to-NO_x is assumed. The nearest sensitive receptors are approximately 215 feet west of the project site, and 0.31 miles east of the project site. The maximum modeled NO_x concentration outside of the project boundary is approximately 18.16 µg/m³ and the NO₂-to-NO_x ratio is approximately 0.053. Therefore, the NO₂ concentration is approximately 0.962 µg/m³, which is less than the threshold of 211.56 µg/m³. The NO₂ concentration at the nearest sensitive receptor (calculated by utilizing the NO₂-to-NO_x ratio) is approximately 0.50 µg/m³ (see Appendix B). The NO₂ concentration at this location is much less than the threshold of 211.56 µg/m³. Therefore, project operation will not cause an exceedance of the LST for NO₂ to sensitive receptors, even under worst-case conditions.

¹⁰ The project site is approximately 0.22 miles in length at its longest point; therefore the on-site mobile source emissions represent approximately 1/31 of the shortest CalEEMod default distance of 6.9 miles. Therefore, to be conservative, 1/10th the distance (dividing the mobile source emissions by 10) was used to represent the portion of the overall mobile source emissions that would occur on-site.

CO 1-hour

Maximum 1-hour concentration from the dispersion of CO emitted primarily from the vehicles traveling on the project site. The emissions from the onsite offroad equipment (five electric forklifts and one diesel yard goat), emergency fire pump and emergency backup generator were also included in the calculations and modeling. The maximum 1-hour CO concentration in SRA 1 (as the data for SRA 3 is not monitored for CO) in the last 3 years (2022-2024) was 1.8 ppm. The 1-hour AAQS for CO is a maximum concentration of 20 ppm. Therefore, the difference in concentrations is 18.2 ppm (20,930 $\mu\text{g}/\text{m}^3$) and the project will have significant air quality impacts if CO concentrations at the nearest sensitive receptor exceed this amount. Based on the AERMOD data (see Appendix B), none of the off-site areas will be exposed to 1-hour CO concentrations greater than 20,930 $\mu\text{g}/\text{m}^3$. In fact, the maximum modeled 1-hour CO concentration as shown in Appendix B is approximately 66.07 $\mu\text{g}/\text{m}^3$, which is much lower than the threshold of 20,930 $\mu\text{g}/\text{m}^3$. Therefore, the project's emissions will not cause an exceedance of the LST for 1-hour CO concentrations during project operation.

CO 8-hour

The maximum 8-hour concentration from the dispersion of CO emitted primarily from the vehicles traveling on the project site. The emissions from the onsite offroad equipment (five electric forklifts and one diesel yard goat), emergency fire pump and emergency backup generator were also included in the calculations and modeling. The maximum 8-hour CO concentration in SRA 1 (as the data for SRA 3 is not monitored for CO) in the last 3 years (2022-2024) was 1.6 ppm. The 8-hour AAQS for CO is a maximum concentration of 9 ppm. Therefore, the difference in concentrations is 7.4 ppm (8,510 $\mu\text{g}/\text{m}^3$) and the project will have significant air quality impacts if CO concentrations at the nearest sensitive receptor exceed this amount. Based on the AERMOD data (see Appendix B), none of the off-site areas will be exposed to 8-hour CO concentrations greater than 8,510 $\mu\text{g}/\text{m}^3$. In fact, the maximum modeled 8-hour CO concentration as shown in Appendix B is approximately 56.25 $\mu\text{g}/\text{m}^3$, which is much lower than the threshold of 8,510 $\mu\text{g}/\text{m}^3$. Therefore, the project's emissions will not cause an exceedance of the LST for 8-hour CO concentrations during project operation.

PM-10 and PM-2.5

For PM-10, the basin is in non-attainment; therefore, per on SCAQMD methodology, based on Rule 1301, the project will have significant air quality impacts if 24-hour PM-10 concentrations at the nearest sensitive receptor exceed 2.5 $\mu\text{g}/\text{m}^3$.

The main source of operational PM-10 emissions is from exhaust. As shown in Tables 16 through 19 in Section 3 of this report, the maximum operational emissions of PM-10 (used as a surrogate for diesel particulate matter [DPM] for the HRA) at the closest receptor location would be 0.00452 $\mu\text{g}/\text{m}^3$. The operations of the project were modeled over 24 hours and include the emissions from on-site vehicles and the emissions from the onsite offroad equipment (five electric forklifts and one diesel yard goat), emergency fire pump and emergency backup generator; therefore, the DPM concentrations reported in Tables 16 through 19 are 24-hour values. As detailed above, the on-site PM-10 emissions would not exceed the 24-hour PM-10 LST threshold of 2.5 $\mu\text{g}/\text{m}^3$.

For on-road diesel fueled vehicles, PM-2.5 represents approximately 99 percent of PM-10 emissions. For purposes of the LST analysis (and to be more conservative as the operational emissions of PM-10 as reported in Table 10 is greater than the emissions of PM-2.5), PM-10, PM-2.5, and diesel particulate matter (DPM) are considered to be basically the same. The project would have significant air quality impacts if 24-hour PM-2.5 concentrations at the nearest sensitive receptor exceed 2.5 $\mu\text{g}/\text{m}^3$. The concentration of PM-2.5 at the closest sensitive receptor is also estimated to be 0.00452 $\mu\text{g}/\text{m}^3$.

Therefore, the project's emissions will not cause an exceedance of the LST for the 24-hour PM-10 or PM-2.5 concentrations during project operation.

Operational LST Conclusion

As no operational LST thresholds would be exceeded, the on-going operations of the proposed project would create a less than significant operations-related impact to local air quality due to on-site emissions and no mitigation would be required.

Operations-Related Odor Impacts

Potential sources that may emit odors during the on-going operations of the proposed project would include odor emissions from the intermittent diesel delivery truck emissions and trash storage areas. Due to the distance of the nearest receptors from the project site and through compliance with SCAQMD's Rule 402 no significant impact related to odors would occur during the on-going operations of the proposed project.

Table 9
CalEEMod Revised Vehicle Mix Parameters for Warehousing

CalEEMod Vehicle Type	Vehicle Mix from Traffic Analysis	CalEEMod Default Mix ¹		CalEEMod Revised Mix ²	
		Ratio	Number of Vehicles ³	Ratio	Number of Vehicles ³
Light Auto	Automobile	0.512	69	0.431	58
Light Truck < 3750 lbs	Automobile	0.045	6	0.038	5
Light Truck 3751-5750 lbs	Automobile	0.228	31	0.192	26
Med Truck 5751-8500 lbs	Automobile	0.139	19	0.117	16
Lite-Heavy Truck 8501-10,000 lbs	2-Axle Truck	0.026	3	0.028	4
Lite-Heavy Truck 10,001-14,000 lbs	2-Axle Truck	0.006	1	0.007	1
Med-Heavy Truck 14,001-33,000 lbs	3-Axle Truck	0.011	1	0.046	6
Heavy-Heavy Truck 33,001-60,000 lbs	4+-Axle Truck	0.008	1	0.123	17
Other Bus	--	0.001	0	0.000	0
Urban Bus	--	0.001	0	0.000	0
Motorcycle	Automobile	0.021	3	0.018	2
School Bus	--	0.001	0	0.000	0
Motor Home	--	0.003	0	0.000	0
Total		1.0	135	1.0	135

Notes:

- (1) Source: CalEEMod Version 2022.1.1.29 default values for Opening year of 2027.
- (2) Revised per the vehicle mix provided in the Traffic Impact Analysis of 79.57% Autos, 3.46% 2-Axle Trucks, 4.64% 3-Axle Trucks and 12.33% 4+ Axle Trucks for the warehouse use.
- (3) Non-PCE (Passenger Car Equivalent)

Table 10
CalEEMod Revised Vehicle Mix Parameters for Manufacturing

CalEEMod Vehicle Type	Vehicle Mix from Traffic Analysis	CalEEMod Default Mix ¹		CalEEMod Revised Mix ²	
		Ratio	Number of Vehicles ³	Ratio	Number of Vehicles ³
Light Auto	Automobile	0.512	384	0.431	323
Light Truck < 3750 lbs	Automobile	0.045	34	0.038	28
Light Truck 3751-5750 lbs	Automobile	0.228	171	0.192	144
Med Truck 5751-8500 lbs	Automobile	0.139	104	0.117	88
Lite-Heavy Truck 8501-10,000 lbs	2-Axle Truck	0.026	19	0.028	21
Lite-Heavy Truck 10,001-14,000 lbs	2-Axle Truck	0.006	5	0.007	5
Med-Heavy Truck 14,001-33,000 lbs	3-Axle Truck	0.011	8	0.046	35
Heavy-Heavy Truck 33,001-60,000 lbs	4+-Axle Truck	0.008	6	0.123	92
Other Bus	--	0.001	1	0.000	0
Urban Bus	--	0.001	0	0.000	0
Motorcycle	Automobile	0.021	16	0.018	13
School Bus	--	0.001	0	0.000	0
Motor Home	--	0.003	2	0.000	0
Total		1.0	749	1.0	749

Notes:

- (1) Source: CalEEMod Version 2022.1.1.29 default values for Opening year of 2027.
- (2) Revised per the vehicle mix provided in the Traffic Impact Analysis of 79.57% Autos, 3.46% 2-Axle Trucks, 4.64% 3-Axle Trucks and 12.33% 4+ Axle Trucks for the manufacturing use.
- (3) Non-PCE (Passenger Car Equivalent)

Table 11
Regional Operational Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	ROG	NOx	CO	SO2	PM10	PM2.5
Maximum Daily Emissions	9.98	6.78	25.00	0.04	2.41	0.89
SCAQMD Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Notes:

Source: CalEEMod Version 2022.1; the higher of either summer or winter emissions.

Table 12
Local Operational Emissions at the Nearest Receptors

On-Site Emission Source	On-Site Pollutant Emissions (pounds/day) ¹			
	NOx	CO	PM10	PM2.5
Area Sources ²	0.10	11.44	0.02	0.02
Energy Usage ³	2.40	2.02	0.18	0.18
Off-Road ⁴	1.08	0.70	0.05	0.04
Stationary ⁵	2.42	2.21	0.13	0.13
Vehicle Emissions ⁶	0.09	0.86	0.20	0.05
Total Emissions	6.09	17.22	0.58	0.42
SCAQMD Thresholds ⁷	189	1,984	12	3
Exceeds Threshold?	No	No	No	No

Notes:

- (1) Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 5 acres.
- (2) Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
- (3) Energy usage consists of emissions from on-site natural gas usage.
- (4) Offroad consists of emissions from one diesel yard goat and 5 electric forklifts.
- (5) Stationary consists of emissions from testing and running of emergency firepump and generator.
- (6) On-site vehicular emissions based on 1/10 of the gross vehicular emissions and road dust.
- (7) The nearest sensitive receptors are the existing single-family detached residential dwelling units located as close as approximately 215 feet (~66 meters) west of the project site; therefore, to be conservative, the 50 meter threshold was used.

CUMULATIVE AIR QUALITY IMPACTS

There are a number of cumulative projects in the project area that have not yet been built or are currently under construction. Since the timing or sequencing of the cumulative projects is unknown, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative. Further, cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered would cover an even larger area. The SCAQMD recommends using two different methodologies: (1) that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality;¹¹ and (2) that a project's consistency with the current AQMP be used to determine its potential cumulative impacts.

Project Specific Impacts

The project area is out of attainment for ozone and in 2022 was out of state attainment for PM10. Construction and operation of cumulative projects will further degrade the local air quality, as well as the air quality of the South Coast Air Basin. The greatest cumulative impact on the quality of regional air cell will be the incremental addition of pollutants mainly from increased traffic volumes from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. Air quality will be temporarily degraded during construction activities that occur separately or simultaneously. However, in accordance with the SCAQMD methodology, projects that do not exceed the SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or state non-attainment pollutant.

Project operations would generate emissions of NOx, ROG, CO, PM10, and PM2.5, which would not exceed the SCAQMD regional or local thresholds and would not be expected to result in ground level concentrations that exceed the NAAQS or CAAQS. Since the project would not introduce any substantial stationary sources of emissions, CO is the benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations. As indicated earlier, no violations of the state and federal CO standards are projected to occur for the project, based on the magnitude of traffic the project is anticipated to create. Therefore, with incorporation of sustainable design and compliance with regulation, operation of the project would not result in a cumulatively considerable net increase for non-attainment of criteria pollutants or ozone precursors. As a result, the project would result in a less than significant cumulative impact for operational emissions.

Air Quality Compliance

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD Air Quality Management Plan (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.

¹¹ South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution White Paper, 1993, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>.

The SCAQMD CEQA Handbook states that "New or amended General Plan 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 in 2016 or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criteria 1 – Increase in the Frequency or Severity of Violations

Based on the air quality modeling analysis contained in this Air Analysis, short-term construction impacts will not result in significant impacts based on the SCAQMD regional and local thresholds of significance. This Air Analysis also found that, long-term operations impacts will not result in significant impacts based on the SCAQMD local and regional thresholds of significance.

Therefore, the proposed project is not projected to contribute to the exceedance of any air pollutant concentration standards and is found to be consistent with the AQMP for the first criterion.

Criteria 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 2020-2045 Regional Transportation/Sustainable Communities Strategy prepared by SCAG (2020) includes chapters on: the challenges in a changing region, creating a plan for our future, and the road to greater mobility and sustainable growth. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA. For this project, the City of Torrance Land Use Plan defines the assumptions that are represented in the AQMP.

The Project Site has a City of Torrance General Plan land use designation of Heavy Industrial (I-HVY). The project proposes to develop the site with a state-of-the-art industrial warehouse/manufacturing facility that includes: 78,891 square feet (SF) of warehousing; 157,782 SF of manufacturing; 26,297 SF of office. The proposed project is consistent with the existing land use designation. Therefore, 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.

3. DIESEL EMISSIONS HEALTH RISK ASSESSMENT

The proposed project would generate toxic air contaminant emissions from diesel truck emissions created by the on-going operations of the proposed project. A Construction HRA was performed by Ganddini within a separate report. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 30-year lifetime will contract cancer, based on the use of revised Office of Environmental Health Hazard Assessment (OEHHA) risk-assessment methodology.

A health risk assessment requires the completion and interaction of four general steps:

- (1) Quantify project-generated TAC emissions.
- (2) Identify nearby ground-level receptor locations that may be affected by the emissions (including any special sensitive receptor locations such as residences, schools, hospitals, convalescent homes, and daycare centers).
- (3) Perform air dispersion modeling analyses to estimate ambient pollutant concentrations at each receptor location using project TAC emissions and representative meteorological data to define the transport and dispersion of those emissions in the atmosphere.
- (4) Characterize and compare the calculated health risks with the applicable health risk significance thresholds.

EMISSION INVENTORY DEVELOPMENT

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.

Emission Source Estimates – DPM from Motor Vehicles

DPM emissions from the various sources were calculated using information derived from the project description, and mobile source emission factors from the CARB EMFAC2025 emissions factor model. Truck mix information was obtained from the TIA and the TGA.

Four pieces of information are required to generate the mobile source emissions from the proposed project:

- Number of vehicle trips for each component of the proposed project;
- Types of vehicles that access the proposed project (passenger car vs. heavy-duty truck and gasoline vs. diesel);
- The allocation of the vehicle trips to each building that comprises the proposed project; and
- Estimate of the vehicle emission factors for estimating exhaust and idling emissions.

Estimate of Vehicle Trips and Vehicle Types

Using the trip generation and truck split data from the TIA, the project is expected to generate approximately 884 (non-passenger car equivalents [PCE]) vehicle trips per day from the warehouse and manufacturing uses. Per the TIA, the vehicle mix for the warehouse/manufacturing portion of the proposed project was based on surveys conducted at existing similar facilities, with a mix of 3.4 percent 2-axle trucks, 4.8 percent 3-axle trucks and 12.3 percent 4-axle trucks for the warehouse use and a mix of 3.3 percent 2-axle trucks, 4.7 percent 3-axle trucks and 12.5 percent 4-axle trucks for the manufacturing use.

Of those total vehicle trips, approximately 31 are 2-axle truck round trips, 41 are 3-axle truck round trips, and 109 are 4+-axle truck round trips per day (non-PCE).

Estimate of Emission Factors

Offroad Sources

According to the SCAQMD *High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results* (June, 2014), warehouses will utilize an average of 0.12 pallet jacks/forklifts per thousand square feet of building area and 3.6 hostlers (yard goats) per million square feet of building area. Based on this data, the total square footage of the project, and input from the developer as to the fuel type for the equipment, offroad sources include emissions from the use of five electric forklifts, 6 hours a day, 5 days a week and one, 200 HP diesel yard goat run for 4 hours a day, 5 days a week.

Stationary Sources

According to a project-specific *Preliminary Fire pump and Generator Sizing* evaluation conducted by RTM Engineering Consultants on May 29, 2025 (see Appendix B), a worst-case scenario for fire protection would require a 745 HP 500-kW standby generator and 2,000 GPM at 150 PSI with a 300 HP motor and 10 HP jockey pump. According to the National Fire Protection Association, diesel fire pumps must be tested on a weekly basis for a minimum of 30 minutes. According to the NFPA 110, emergency back-up generators need to be tested monthly for 30 minutes or more. Therefore, stationary sources include emissions from the occasional use/testing of a 745 HP emergency back-up diesel generator run for 0.5 hours per day, 12 hours a year, and 300 HP diesel emergency fire pump with 10 HP jockey pump run for 0.5 hours per day, 26 hours a year.

The emissions of 0.0081 tons/year from the onsite emissions sources detailed above were converted into grams/sec. The total size of the emissions area was estimated to be 54,590.2 m² (corresponds to the area of the site). See Table 13 for the emissions factor used.

PM 10 running and idling exhaust emissions are used as a surrogate for DPM. The DPM emission factors for the various vehicle types were derived from the CARB EMFAC2025 mobile source emission model. The emissions factors were derived for Los Angeles County (see Appendix C).

Emissions factors were estimated to establish the emissions generated while the vehicles travel off-site, along travel links from the entrance to the proposed buildings, and while idling at the proposed building. All vehicles were assumed to travel on-site at a speed of 10 miles per hour. Off-site, the speeds along the roads were anticipated to average 35 miles per hour. Delivery vehicles were assumed to idle for a maximum of 15 minutes per vehicle per day (5 minutes per location: at the facility entrance, at the loading bay, and at the facility exit, in keeping with the CARB Air Toxic Control Measure (ATCM), which regulates truck idling time (CARB 2005)). The emissions factors used in this assessment are detailed in Table 13. It should be noted that the DPM emissions on both the gram per mile and gram per idle hour bases decline beyond 2027 for all vehicle classes and in particular the heavy-heavy-duty truck class (the 4+ axle “big rig” trucks). This is due to the CARB emissions’ requirements on heavy-duty trucks that call for either the replacement of older trucks with cleaner trucks or the installation of diesel particulate matter filters on the truck fleet.

Emission Source Characterization

Each of the emission source types described above also requires geometrical and emission release specifications for use in the air dispersion model. An average truck height of 13.5 feet and average truck width of 8.5 feet were entered into the haul road calculator in AERMOD in order to calculate the plume height and release height for the line sources. The following definitions are used to characterize the emission source geometrical configurations referred to in Table 14:

- Point source: A single, identifiable, local source of emissions; it is approximated in the AERMOD air dispersion model as a mathematical point in the modeling region with a location and emission characteristics such as height of release, temperature, etc., for example, a truck idle location where emissions are sourced from the truck's exhaust stack while the vehicle is stationary.
- Line source: A series of volume sources along a path, for example, vehicular traffic volumes along a roadway.
- Area source: An area of specific size where emissions are evenly distributed over the entire area, for example, onsite equipment.

Figure 3 provides the location of the project buildings, emission source locations, and the locations of the nearest sensitive receptors (the pre-school facility and the single-family detached residential dwelling units located along the western side of Crenshaw Boulevard, and north of 190th St, east of Van Ness Avenue). The pre-school receptor is shown as an orange triangle labeled Preschool_1, the closest residential receptors are shown as orange triangles labeled 2 through 8. The direction of on and off-site truck travel was estimated based on the TIA, site plan, and/or traffic engineer.

RECEPTOR NETWORK

The assessment requires that a network of receptors be specified where the impacts can be computed at the various locations surrounding the project. Receptors were located at existing sensitive receptors surrounding the proposed project (as detailed above). In addition, the identified closest (representative) sensitive receptor locations were supplemented by the specification of a modeling grid that extended around the proposed project to identify other potential locations of impact. The locations of the discrete receptors are shown as orange triangles on Figure 3.

DISPERSION MODELING

The next step in the assessment process utilizes the emissions inventory along with a mathematical air dispersion model and representative meteorological data to calculate impacts at the various receptor locations. The dispersion model used in this assessment is described below.

Model Selection

The assessment of air quality and health risk impacts from pollutant emissions from this project applied the USEPA AERMOD Model, which is the air dispersion model accepted by the SCAQMD for performing air quality impact analyses. AERMOD predicts pollutant concentrations from point, area, volume, line, and flare sources with variable emissions in terrain from flat to complex with the inclusion of building downwash effects from buildings on pollutant dispersion. It captures the essential atmospheric physical processes and provides reasonable estimates over a wide range of meteorological conditions and modeling scenarios. AERMOD View Version 13.0.0, version No. 23132, was utilized for this analysis.

General Model Assumptions

A summary of Emission Configurations is shown in Table 14. The basic options used in the dispersion modeling are summarized in Table 15.

As indicated in Table 15 the analysis takes into account the effects of building downwash on the dispersion of emissions from the various sources located on the project's property. Building downwash occurs when the aerodynamic turbulence, induced by nearby buildings, causes pollutants emitted from an elevated source to be mixed rapidly toward the ground (downwash), resulting in potentially higher ground-level concentrations than if the buildings were not present. The AERMOD dispersion model contains algorithms to account for

building downwash effects. The required information includes the location of the emission source; the location of adjacent buildings; and the building geometry in terms of length, width, and height. For purposes of this analysis, the emission source (loading docks) location, building location and height were taken from the project site plan.

Meteorological Data

Meteorological data (processed with the ADJ_U option) from the Air District's Hawthorne monitoring site was selected for this modeling application. Five full years of sequential meteorological data was collected at the site from January 1, 2016 to December 31, 2021 by the SCAQMD. The SCAQMD processed the data for input to the model. The data was obtained at SCAQMD's HRA Tool and data files website¹² (see Figure 4).

ESTIMATION OF HEALTH RISKS

Health risks from diesel particulate matter are twofold. First, diesel particulate matter is a carcinogen according to the State of California. Second, long-term chronic exposure to diesel particulate matter can cause health effects to the respiratory system. Each of these health risks is discussed below.

Cancer Risks

According to the *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, released by the Office of Environmental Health Hazard Assessment (OEHHA) in February 2015 and formally adopted in March 2015, the residential inhalation dose for cancer risk assessment should be calculated using the following formula:

$$[\text{Dose-air (mg)/(Kg-day)}] * \text{Cancer Potency} * [1 \times 10^{-6}] = \text{Potential Cancer Risk}$$

Where:

Cancer Potency Factor = 1.1

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

Where:

Cair [Concentration in air (µg/m³)] = (Calculated by AERMOD Model)

DBR [Daily breathing rate (L/kg body weight – day)] = 261 for adults, 572 for children, and 1,090 for infants, and 361 for 3rd trimester per SCAQMD guidance.

A [Inhalation absorption factor] = 1

EF [Exposure frequency (days/year)] = 350

ED [Exposure duration (years)] = 30 for adults (for an individual who is an adult at opening year), 14 for children (from 2-16 years), 14 for adults (from 16-30 years), 2 for infants, and 1 for 3rd Trimester

ASF [Age sensitivity factor] = 10 for 3rd trimester to 2 years of age, 3 for 2 to 16 years of age, and 1 for 16 to 30 years of age

FAH [Fraction of time spent at home] = 1 for 3rd trimester to 2 years of age, 1 for 2 to 16 years of age, and 0.73 for 16 to 30 years of age

10⁶ [Micrograms to milligrams conversion]

AT [Average time period over which exposure is averaged in days] = 25,550

The model run results are shown in Appendix C. Figure 5 illustrates the cancer risk to the most affected age-group, children (2-16-years). Table 16 show the cancer risk for the unborn child during the 3rd trimester, Table 17 shows the cancer risk to infants (0-2 years), Table 18 shows the cancer risk to children ages 2 to 16 years and Table 19 shows the cancer risk as that child becomes an adult (years 16-30).

¹² https://www.aqmd.gov/assets/aermet/AERMET_files_And_HRA_Tool.html

The highest cancer risk corresponds to receptor 2, with a maximum risk of 1.64 in one million. The maximum 3rd trimester (0.25-year) cancer risk is at receptor 2; with a maximum cancer risk of 0.06 in a million. The highest infant (0-2 years) cancer risk is at receptor 2; with a maximum risk of 1.48 in one million and the highest adult (16-30 years) cancer risk is at receptor 2; with a maximum risk of 0.18 in one million. Therefore, no children, infants, or adults are exposed to cancer risks in excess of 10 in a million.

The assessment of operational cancer-related health risk to sensitive receptors within the project vicinity is based on the following most-conservative scenario:

- an unborn child in its 3rd trimester is potentially exposed to DPM emissions (via exposure of the mother) during the opening year,
- that child is born opening year and then remains at home for the entire first two years of life
- from age 2 to 16, the child remains at home 100 percent of the time
- from age 16 to 30, the child continues to live at home, growing into an adult that spends 73 percent of its time at home and lives there until age 30.

Based on the above, ultra-conservative assumptions, the 30.25-year, operational cumulative carcinogenic health risk (3rd trimester [-0.25 to 0 years] + infant [0-2 years] + child [2-16 years] + adult [16-30 years]) to an individual born during the opening year of the project, and located in the project vicinity for the entire 30-year duration, is a maximum of 3.36 in a million, as shown in Table 20.

When this cancer risk is added to the construction cancer risk analyzed in the Construction HRA (under a separate cover) the highest total cumulative cancer risk for construction plus operation would be at receptor 2, at 6.84 in a million¹³

Therefore, the on-going operations of the proposed project would result in a less than significant impact due to the operational cancer risk from diesel emissions created by the proposed project. As the residential cancer risk does not exceed 10 in a million, it is anticipated that any offsite worker risk (where the potential for exposure is only 8 hours instead of 24 hours per day) would also not exceed 10 in a million.

Non-Cancer Risks

The relationship for non-cancer health effects is given by the equation:

$$\text{HIDPM} = \text{CDPM}/\text{RELDPM}$$

Where,

- HIDPM = Hazard Index; an expression of the potential for non-cancer health effects.
- CDPM = Annual average diesel particulate matter concentration in $\mu\text{g}/\text{m}^3$.
- RELDPM = Reference Exposure Level (REL) for diesel particulate matter; the diesel particulate matter concentration at which no adverse health effects are anticipated.

The non-carcinogenic hazards to residential adult, 3rd trimester, child and infant receptors are also detailed in Tables 16 through 19 column (j). The RELDPM is 5 $\mu\text{g}/\text{m}^3$. The Office of Environmental Health Hazard Assessment as protective for the respiratory system has established this concentration. Using the maximum DPM concentration for year 2027, the resulting Hazard Index is:

$$\text{HIDPM} = 0.00452/5 = 0.0009$$

¹³ Cancer risk at receptor 2 of 0.18+3.30+3.36.

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

When the operational HRA data is added to the construction HRA data (under a separate cover), the total non-cancer risk is 0.0045.¹⁴ Therefore, when combined, the construction and operational non-cancer risk would result in a less than significant impact also.

¹⁴ $0.0036 + 0.0009 = 0.0045$

Table 13
DPM Emissions Factors for the Proposed Project

Emergency diesel fuel fire pump, generator, and on-site offroad equipment (forklifts and yard goat)	4.27218E-9 g/m ² /sec
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Notes:

Source: Calculated from CalEEMod Annual Output PM-10 exhaust emissions for stationary and offroad sources.

Vehicle Class	Opening Year-2027		
	Idling (g/hr)	On-Site Travel (g/mi)	Off-Site Travel (g/mi)
Light Heavy Duty Truck 2	0.80311	0.03275	0.01417
Medium Heavy Duty Truck	0.01578	0.00614	0.00262
Heavy Heavy Duty Truck	0.00779	0.00677	0.00435

Notes:

Source: EMFAC2025.

Table 14
Summary of Emission Configurations

Emission Source Type	Geometric Configuration	Relevant Assumptions
On-Site Stationary Source	Area Source	An average height of 6 feet for all onsite equipment was used.
Off-Site Diesel Truck Traffic	Line Sources	Stack release height: 3.5 m
		Vehicle speed: 35 mph
		Length of the line sources (along Crenshaw Blvd, Crenshaw Pl, and along 190th St)
		Vehicle types: heavy-heavy-duty, medium-heavy-duty and light-heavy-duty diesel delivery trucks
		Emission factor: CARB EMFAC2025
On-Site Diesel Truck Traffic	Line Sources	Stack release height: 3.5 m
		Vehicle speed: 10 mph
		Length of the line source (distance from the facility entrance to the loading docks to the facility exit)
		Vehicle types: heavy-heavy-duty, medium-heavy-duty and light-heavy-duty diesel delivery trucks
		Emission factor: CARB EMFAC2025
On-Site Diesel Truck Idling	Point Sources located at the loading docks	Stack release height: 3.5 m
		Stack release characteristics
		> Stack diameter: 0.1 meter (0.3 feet)
		> Stack velocity: 51.9 mps (170 feet/sec)
		> Stack temperature: 366 °k (200° F)
		Idle time: 15 minutes per truck per day
		Vehicle types: heavy-heavy-duty, medium-heavy-duty and light-heavy-duty diesel delivery trucks
		Emission factor: CARB EMFAC2025

Table 15
General Modeling Assumptions - AERMOD Model

Feature	Option Selected
Terrain processing	AERMAP - NED GEOTIFF 30 m
Emission source configuration	See Table 15
Regulatory dispersion options	Default
Land use	Urban
Coordinate system	UTM, Zone 11 north
Building downwash	Included in calculations
Receptor height	0 meters above ground (per SCAQMD methodology)
Meteorological data	SCAQMD Hawthorne Meteorological Data

Table 16
Carcinogenic Risks and Non-Carcinogenic 3rd Trimester Exposure Scenario (0.25-Years)

Receptor ID (a)	Maximum Concentration		Weight Fraction (d)	Contaminant (e)	Carcinogenic Hazards		Noncarcinogenic Hazards		
	(ug/m3) (b)	(mg/m3) (c)			CPF	RISK (per	REL	RfD	Index
					(mg/kg/day) (f)	million) (g)	(ug/m3) (h)	(mg/kg/day) (i)	
Preschool_1	0.00291	2.9E-06	1.00E+00	DPM	1.1E+00	0.04	5.0E+00	1.4E-03	0.0006
2	0.00452	4.5E-06	1.00E+00	DPM	1.1E+00	0.06	5.0E+00	1.4E-03	0.0009
3	0.00315	3.2E-06	1.00E+00	DPM	1.1E+00	0.04	5.0E+00	1.4E-03	0.0006
4	0.00221	2.2E-06	1.00E+00	DPM	1.1E+00	0.03	5.0E+00	1.4E-03	0.0004
5	0.00139	1.4E-06	1.00E+00	DPM	1.1E+00	0.02	5.0E+00	1.4E-03	0.0003
6	0.00096	9.6E-07	1.00E+00	DPM	1.1E+00	0.01	5.0E+00	1.4E-03	0.0002
7	0.00158	1.6E-06	1.00E+00	DPM	1.1E+00	0.02	5.0E+00	1.4E-03	0.0003
8	0.0012	1.2E-06	1.00E+00	DPM	1.1E+00	0.02	5.0E+00	1.4E-03	0.0002

Notes:

Exposure factors used to calculate TAC intake:

Exposure Frequency (days/year)	350
Exposure Duration (years)	0.25
Daily Breathing Rate	361
Age Sensitivity Factor	10
Fraction of Time At Home (FAH)	1
Averaging Time _(cancer) (days)	25550
Averaging Time _(non-cancer) (days)	91.25

E= 10⁻⁶, i.e. E-02 = 10⁻⁴

Table 17
Carcinogenic Risks and Non-Carcinogenic Infant Exposure Scenario (0-2 Years)

Receptor ID (a)	Maximum Concentration		Weight Fraction (d)	Contaminant (e)	Carcinogenic Hazards		Noncarcinogenic Hazards		
	(ug/m3) (b)	(mg/m3) (c)			CPF (mg/kg/day) (f)	RISK (per million) (g)	REL (ug/m3) (h)	RfD (mg/kg/day) (i)	Index (j)
Preschool_1	0.00291	2.9E-06	1.00E+00	DPM	1.1E+00	0.96	5.0E+00	1.4E-03	0.0006
2	0.00452	4.5E-06	1.00E+00	DPM	1.1E+00	1.48	5.0E+00	1.4E-03	0.0009
3	0.00315	3.2E-06	1.00E+00	DPM	1.1E+00	1.03	5.0E+00	1.4E-03	0.0006
4	0.00221	2.2E-06	1.00E+00	DPM	1.1E+00	0.73	5.0E+00	1.4E-03	0.0004
5	0.00139	1.4E-06	1.00E+00	DPM	1.1E+00	0.46	5.0E+00	1.4E-03	0.0003
6	0.00096	9.6E-07	1.00E+00	DPM	1.1E+00	0.32	5.0E+00	1.4E-03	0.0002
7	0.00158	1.6E-06	1.00E+00	DPM	1.1E+00	0.52	5.0E+00	1.4E-03	0.0003
8	0.0012	1.2E-06	1.00E+00	DPM	1.1E+00	0.39	5.0E+00	1.4E-03	0.0002

Notes:

Exposure factors used to calculate TAC intake:

Exposure Frequency (days/year)	350
Exposure Duration (years)	2
Daily Breathing Rate	1090
Age Sensitivity Factor	10
Fraction of Time At Home (FAH)	1
Averaging Time _(cancer) (days)	25550
Averaging Time _(non-cancer) (days)	730

E= 10⁻⁶, i.e. E-02 = 10⁻⁴

Table 18
Carcinogenic Risks and Non-Carcinogenic Child Exposure Scenario (2-16 Years)

Receptor ID (a)	Maximum Concentration		Weight Fraction (d)	Contaminant (e)	Carcinogenic Hazards		Noncarcinogenic Hazards		
	(ug/m3) (b)	(mg/m3) (c)			CPF	RISK (per	REL	RfD	Index
					(mg/kg/day) (f)	million) (g)	(ug/m3) (h)	(mg/kg/day) (i)	
Preschool_1	0.00291	2.9E-06	1.00E+00	DPM	1.1E+00	1.05	5.0E+00	1.4E-03	0.0006
2	0.00452	4.5E-06	1.00E+00	DPM	1.1E+00	1.64	5.0E+00	1.4E-03	0.0009
3	0.00315	3.2E-06	1.00E+00	DPM	1.1E+00	1.14	5.0E+00	1.4E-03	0.0006
4	0.00221	2.2E-06	1.00E+00	DPM	1.1E+00	0.80	5.0E+00	1.4E-03	0.0004
5	0.00139	1.4E-06	1.00E+00	DPM	1.1E+00	0.50	5.0E+00	1.4E-03	0.0003
6	0.00096	9.6E-07	1.00E+00	DPM	1.1E+00	0.35	5.0E+00	1.4E-03	0.0002
7	0.00158	1.6E-06	1.00E+00	DPM	1.1E+00	0.57	5.0E+00	1.4E-03	0.0003
8	0.0012	1.2E-06	1.00E+00	DPM	1.1E+00	0.43	5.0E+00	1.4E-03	0.0002

Notes:

Exposure factors used to calculate TAC intake:

Exposure Frequency (days/year)	350
Exposure Duration (years)	14
Daily Breathing Rate	572.00
Age Sensitivity Factor	3
Fraction of Time At Home (FAH)	1
Averaging Time _(cancer) (days)	25550
Averaging Time _(non-cancer) (days)	5110

E= 10⁴, i.e. E-02 = 10⁻⁴

Table 19
Carcinogenic Risks and Non-Carcinogenic Hazards Adult Exposure Scenario (16-30 Years)

Receptor ID (a)	Maximum Concentration		Weight Fraction (d)	Contaminant (e)	Carcinogenic Hazards		Noncarcinogenic Hazards		
	(ug/m3) (b)	(mg/m3) (c)			CPF	RISK (per	REL	RfD	Index
					(mg/kg/day) (f)	million) (g)	(ug/m3) (h)	(mg/kg/day) (i)	
Preschool_1	0.00291	6.9E-04	1.00E+00	DPM	1.1E+00	0.12	5.0E+00	1.4E-03	0.0006
2	0.00452	8.3E-04	1.00E+00	DPM	1.1E+00	0.18	5.0E+00	1.4E-03	0.0009
3	0.00315	1.9E-03	1.00E+00	DPM	1.1E+00	0.13	5.0E+00	1.4E-03	0.0006
4	0.00221	1.4E-03	1.00E+00	DPM	1.1E+00	0.09	5.0E+00	1.4E-03	0.0004
5	0.00139	1.4E-03	1.00E+00	DPM	1.1E+00	0.06	5.0E+00	1.4E-03	0.0003
6	0.00096	1.0E-03	1.00E+00	DPM	1.1E+00	0.04	5.0E+00	1.4E-03	0.0002
7	0.00158	1.6E-06	1.00E+00	DPM	1.1E+00	0.06	5.0E+00	1.4E-03	0.0003
8	0.0012	1.2E-06	1.00E+00	DPM	1.1E+00	0.05	5.0E+00	1.4E-03	0.0002

Notes:

Exposure factors used to calculate TAC intake:

Exposure Frequency (days/year)	350
Exposure Duration (years)	14
Daily Breathing Rate	261
Age Sensitivity Factor	1
Fraction of Time At Home (FAH)	0.73
Averaging Time _(cancer) (days)	25550
Averaging Time _(non-cancer) (days)	5110

E= 10⁻⁶, i.e. E-02 = 10⁻⁴

Table 20
Cumulative Carcinogenic Risk
30.25 Year Exposure Scenario

Receptor ID	Cumulative RISK (per million)
Preschool_1	2.17
2	3.36
3	2.34
4	1.64
5	1.03
6	0.71
7	1.18
8	0.89



Legend

- Project Site Boundary
- On/Off Site Truck Travel
- Onsite emissions area source
- ★ Truck Idling Locations
- ▲ Discrete Receptors
- Cartesian Receptor

Figure 3
AERMOD Model Source and Receptor Placement

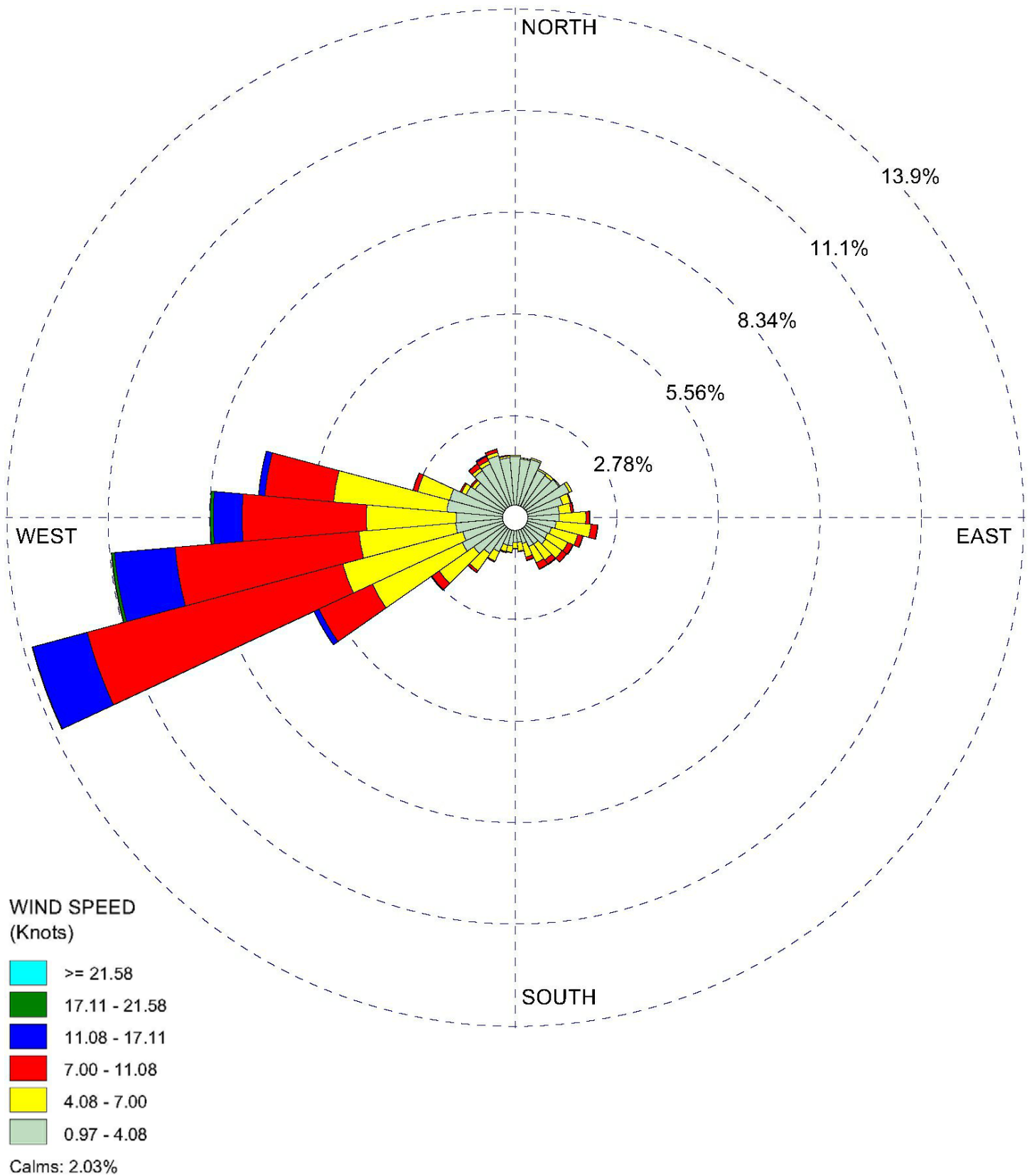
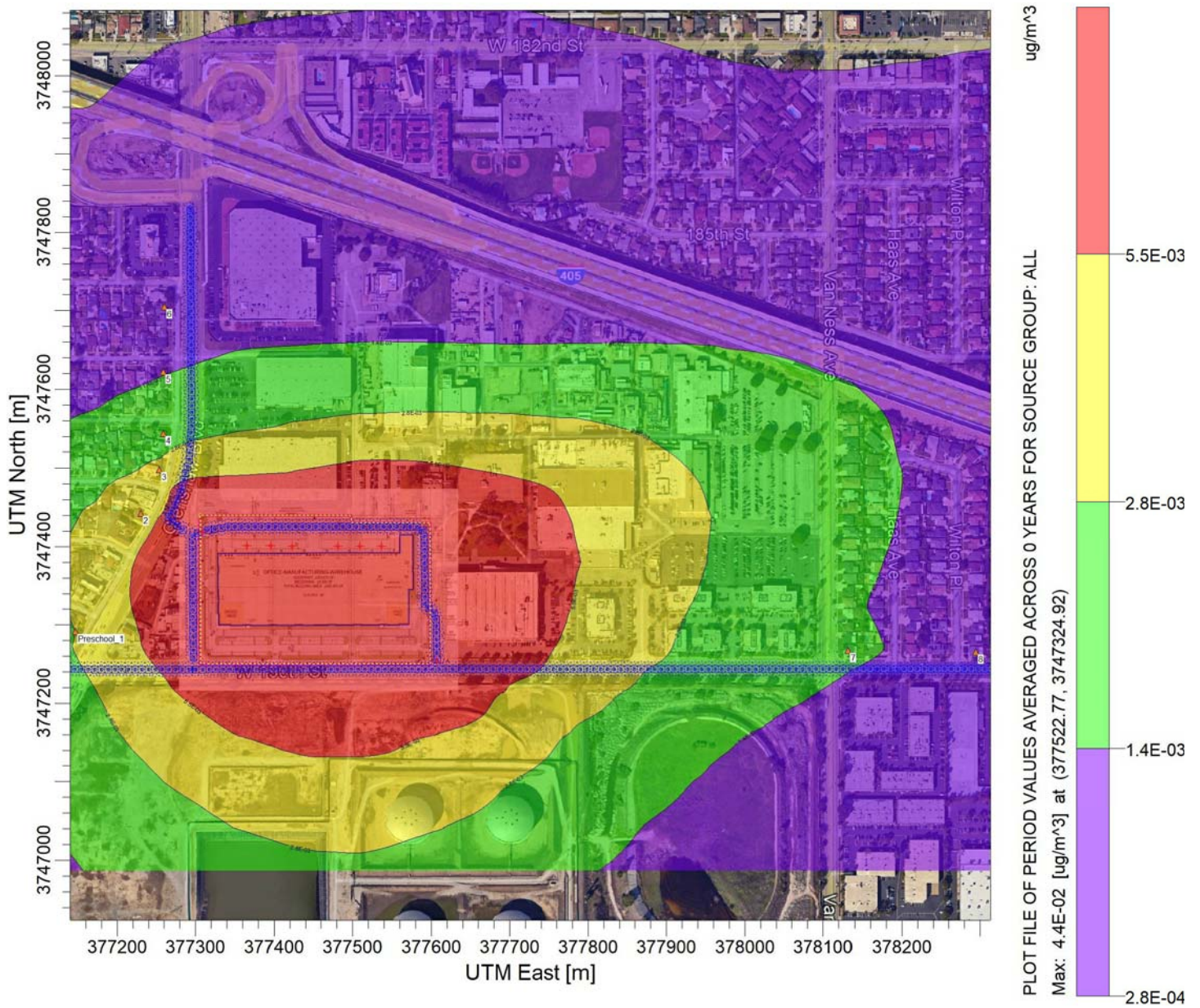


Figure 4
Wind Rose: Hawthorne



Legend

Cancer Risk to Children 2-16 Years

- 2 in a million
- 1 in a million
- 0.5 in a million
- 0.1 in a million

Figure 5
Modeled Study Area Highest Cancer Risk from Annual DPM Emissions

4. GLOBAL CLIMATE CHANGE ANALYSIS

EXISTING GREENHOUSE GAS ENVIRONMENT

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHG), play a critical role in the Earth's radiation amount by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO₂), methane (CH₄), ozone, water vapor, nitrous oxide (N₂O), 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. Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of CO₂ and nitrous oxide (NO_x) are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO₂, where CO₂ 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 (CO₂)

The natural production and absorption of CO₂ 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. CO₂ 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 Fifth Assessment Report, 2014) Emissions of CO₂ from fossil fuel combustion and industrial processes contributed about 78% of the total GHG emissions increase from 1970 to 2010, with a similar percentage contribution for the increase during the period 2000 to 2010. Globally, economic and population growth continued to be the most important drivers of increases in CO₂ emissions from fossil fuel combustion. The contribution of population growth between 2000 and 2010 remained roughly identical to the previous three decades, while the contribution of economic growth has risen sharply.

Methane (CH₄)

CH₄ is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of CO₂. Its lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as CO₂, N₂O, and Chlorofluorocarbons (CFCs)). CH₄ 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 anthropogenic sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide (N₂O)

Concentrations of N₂O 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). N₂O 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. It 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 in race cars).

Chlorofluorocarbons (CFC)

CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C₂H₆) 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. It was 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 (HFC)

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 (CHF₃), HFC-134a (CF₃CH₂F), and HFC-152a (CH₃CHF₂). 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 (PFC)

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 (CF₄) and hexafluoroethane (C₂F₆). Concentrations of CF₄ in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

Sulfur Hexafluoride (SF₆)

SF₆ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF₆ has the highest global warming potential of any gas evaluated; 23,900 times that of CO₂. Concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Aerosols

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

Global Warming Potential

The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO₂). The larger the GWP, the more that a given gas warms the Earth compared to CO₂ over that time period. The time period usually used for GWPs is 100 years. GWPs provide a common unit of measure, which allows analysts to add up emissions estimates of different gases (e.g., to compile a national GHG inventory), and allows policymakers to compare emissions reduction opportunities across sectors and gases. A summary of the atmospheric lifetime and the global warming potential of selected gases are summarized in Table 21. As shown in Table 21, the global warming potential of GHGs ranges from 1 to 22,800.

Table 21
Global Warming Potentials and Atmospheric Lifetimes

Gas	Atmospheric Lifetime	(100 Year Horizon)
Carbon Dioxide (CO ₂)	— ²	1
Methane (CH ₄)	12	28-36
Nitrous Oxide (NO)	114	298
Hydrofluorocarbons (HFCs)	1-270	12-14,800
Perfluorocarbons (PFCs)	2,600-50,000	7,390-12,200
Nitrogen trifluoride (NF ₃)	740	17,200
Sulfur Hexafluoride (SF ₆)	3,200	22,800

Notes:

Source: <http://www3.epa.gov/climatechange/ghgemissions/gases.html>

- (1) Compared to the same quantity of CO₂ emissions.
- (2) Carbon dioxide's lifetime is poorly defined because the gas is not destroyed over time, but instead moves among different parts of the ocean-atmosphere-land system. Some of the excess carbon dioxide will be absorbed quickly (for example, by the ocean surface), but some will remain in the atmosphere for thousands of years, due in part to the very slow process by which carbon is transferred to ocean sediments.

GREENHOUSE GAS STANDARDS AND REGULATION

International

Montreal Protocol

In 1988, the United Nations established the Intergovernmental Panel on Climate Change (IPCC) to evaluate the impacts of global climate change and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the United Nations' Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling GHG emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHGs in the United States. The plan consists of more than 50 voluntary programs.

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.

The Paris Agreement

The Paris Agreement became effective on November 4, 2016. Thirty days after this date at least 55 Parties to the United Nations Framework Convention on Climate Change (Convention), accounting in total for at least an estimated 55 % of the total global greenhouse gas emissions, had deposited their instruments of ratification, acceptance, approval or accession with the Depositary.

The Paris Agreement built upon the Convention and – for the first time – attempted to bring all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort.

The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework. However, on January 20, 2025, President Trump signed an Executive Order to withdraw the U.S. from the Paris Agreement. The effective date will be sometime in January 2026.

Federal

The United States Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions. The USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the ENERGY STAR labeling system for energy-efficient products) play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

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 will not themselves impose any requirements on industry or other entities. However, it is a prerequisite to finalizing the EPA's proposed GHG emission standards for light-duty vehicles, which were jointly proposed by the EPA and Department of Transportation on September 15, 2009.

Clean Air Act

In *Massachusetts v. Environmental Protection Agency* (Docket No. 05-1120), the U.S. Supreme Court held in April of 2007 that the USEPA has statutory authority under Section 202 of the federal Clean Air Act (CAA) to regulate GHGs. The court did not hold that the USEPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA. The USEPA adopted a Final Endangerment Finding for the six defined GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) on December 7, 2009. The Endangerment Finding is required before USEPA can regulate GHG emissions under Section 202(a)(1) of the CAA consistently with the United States Supreme Court decision. The USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

Energy Independence Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by the USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.¹⁵

Executive Order 13432

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the President signed Executive Order 13432 on May 14, 2007, directing the USEPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision. Executive Order 13432 was codified into law by the 2009 Omnibus Appropriations Law signed on February 17, 2009. The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation. Light-Duty Vehicle Greenhouse Gas and Corporate Average Fuel Economy Standards.

On May 19, 2009, President Obama announced a national policy for fuel efficiency and emissions standards in the United States auto industry. The adopted federal standard applies to passenger cars and light-duty trucks for model years 2012 through 2016. The rule surpasses the prior Corporate Average Fuel Economy standards (CAFE)¹⁶ and requires an average fuel economy standard of 35.5 miles per gallon (mpg) and 250 grams of CO₂ per mile by model year 2016, based on USEPA calculation methods. These standards were formally adopted on April 1, 2010. In August 2012, standards were adopted for model year 2017 through 2025 for passenger cars and light-duty trucks. By 2025, vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO₂ per mile. According to the USEPA, a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle.¹⁷ In 2017, the USEPA recommended no change to the GHG standards for light-duty vehicles for model years 2022-2025.

In December 2021, the EPA finalized federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026. The updated standards will result in avoiding more than 3 billion tons of GHG emissions through 2050. These standards set the light-duty vehicle GHG program on track to provide a strong launch point for the agency's next phase of standards for model year 2027 and beyond.¹⁸ On April 12, 2023, EPA announced new, more ambitious proposed standards to further reduce harmful air pollutant emissions from light-duty and medium-duty vehicles starting with model year 2027. The proposal builds upon EPA's final standards for federal greenhouse gas emissions standards for passenger cars and light trucks for model years 2023 through 2026 and leverages advances in clean car technology to unlock benefits to Americans ranging from reducing climate pollution, to improving public health, to saving drivers money through reduced fuel and maintenance costs. The proposed standards would phase in over model years 2027 through 2032.¹⁹

Issued by NHTSA and EPA in March 2020 (published on April 30, 2020 and effective after June 29, 2020), the Safer Affordable Fuel-Efficient Vehicles Rule would maintain the CAFE and CO₂ standards applicable in

¹⁵ A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

¹⁶ The Corporate Average Fuel Economy standards are regulations in the United States, first enacted by Congress in 1975, to improve the average fuel economy of cars and light trucks. The U.S. Department of Transportation has delegated the National Highway Traffic Safety Administration as the regulatory agency for the Corporate Average Fuel Economy standards.

¹⁷ United States Environmental Protection Agency, EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks, August 2012, <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.PDF>.

¹⁸ United States Environmental Protection Agency (EPA), Regulations for Emissions from Vehicles and Engines, Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026. <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>

¹⁹ United States Environmental Protection Agency (EPA), Regulations for Emissions from Vehicles and Engines, Proposed Rule: Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles. <https://www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-multi-pollutant-emissions-standards-model>

model year 2020 for model years 2021 through 2026. The estimated CAFE and CO₂ standards for model year 2020 are 43.7 mpg and 204 grams of CO₂ per mile for passenger cars and 31.3 mpg and 284 grams of CO₂ per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. This Rule also excludes CO₂-equivalent emission improvements associated with air conditioning refrigerants and leakage (and, optionally, offsets for nitrous oxide and methane emissions) after model year 2020.²⁰

On May 12, 2021, the National Highway Traffic Safety Administration (NHTSA) published a notice of proposed rulemaking in the Federal Register, proposing to repeal “The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program,” published Sept. 27, 2019 (SAFE I Rule), in which NHTSA codified regulatory text and made additional pronouncements regarding the preemption of state and local laws related to fuel economy standards. Specifically, this document proposed to fully repeal the regulatory text and appendices promulgated in the SAFE I Rule. In addition, this document proposed to repeal and withdraw the interpretative statements made by the Agency in the SAFE I Rule preamble, including those regarding the preemption of particular state Greenhouse Gas (GHG) Emissions standards or Zero Emissions Vehicle (ZEV) mandates. As such, this document proposed to establish a clean slate with respect to NHTSA’s regulations and interpretations concerning preemption under the Energy Policy and Conservation Act (EPCA).²¹ This action is effective as of January 28, 2022.²²

State of California

California Air Resources Board

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, CARB conducts research, sets state ambient air quality standards (California Ambient Air Quality Standards [CAAQS]), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In 2004, the California Air Resources Board (CARB) adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (Title 13 California Code of Regulations [CCR], Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure generally does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks. While this measure primarily targets diesel particulate matter emissions, it has co-benefits of minimizing GHG emissions from unnecessary truck idling.

In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, Section 2025, subsection (h)). CARB has also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation, adopted by the CARB on July 26, 2007, aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with

²⁰ National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA), 2018. Federal Register / Vol. 83, No. 165 / Friday, August 24, 2018 / Proposed Rules, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks 2018. Available at: <https://www.gpo.gov/fdsys/pkg/FR-2018-08-24/pdf/2018-16820.pdf>.

²¹ <https://www.federalregister.gov/documents/2021/05/12/2021-08758/corporate-average-fuel-economy-cafe-preemption>

²² <https://www.federalregister.gov/documents/2021/05/12/2021-08758/corporate-average-fuel-economy-cafe-preemption>

newer emission-controlled models. Refer to Section IV.B, *Air Quality*, of this Draft EIR for additional details regarding these regulations. While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies.

The State currently has no regulations that establish ambient air quality standards for GHGs. However, the State has passed laws directing CARB to develop actions to reduce GHG emissions, which are listed below.

Assembly Bill 1493

California Assembly Bill 1493 enacted on July 22, 2002, required the CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. In 2005, the CARB submitted a “waiver” request to the EPA from a portion of the federal Clean Air Act in order to allow the State to set more stringent tailpipe emission standards for CO₂ and other GHG emissions from passenger vehicles and light duty trucks. On December 19, 2007 the EPA announced that it denied the “waiver” request. On January 21, 2009, CARB submitted a letter to the EPA administrator regarding the State’s request to reconsider the waiver denial. The EPA approved the waiver on June 30, 2009.

Executive Order S-3-05

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

- By 2010, California shall reduce GHG emissions to 2000 levels;
- By 2020, California shall reduce GHG emissions to 1990 levels; and
- By 2050, California shall reduce GHG 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.

Assembly Bill 32 (California Health and Safety Code, Division 25.5 – California Global Warming Solutions Act of 2006)

In 2006, the California State Legislature adopted Assembly Bill (AB) 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. HSC Division 25.5 defines GHGs as CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under HSC Division 25.5, CARB has the primary responsibility for reducing GHG emissions. CARB is required to adopt rules and regulations directing state actions that would achieve GHG emissions reductions equivalent to 1990 statewide levels by 2020.

Senate Bill 32 and Assembly Bill 197

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown. SB 32 and AB 197 amends HSC Division 25.5 and establishes a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and includes provisions to ensure the benefits of state climate policies reach into disadvantaged communities.

Climate Change Scoping Plan (2008)

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020 (Health and Safety Code section 38561 (h)). CARB developed an AB 32 Scoping Plan that contains strategies to achieve the 2020 emissions cap. The initial Scoping Plan was approved in 2008, and contains a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives.

As required by HSC Division 25.5, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was originally set at 427 MMTCO₂e using the GWP values from the IPCC SAR. CARB also projected the state's 2020 GHG emissions under no-action-taken (NAT) conditions – that is, emissions that would occur without any plans, policies, or regulations to reduce GHG emissions. CARB originally used an average of the state's GHG emissions from 2002 through 2004 and projected the 2020 levels at approximately 596 MMTCO₂e (using GWP values from the IPCC SAR). Therefore, under the original projections, the state must reduce its 2020 NAT emissions by 28.4 percent in order to meet the 1990 target of 427 MMTCO₂e.

First Update to the Climate Change Scoping Plan (2014)

The First Update to the Scoping Plan was approved by CARB in May 2014 and builds upon the initial Scoping Plan with new strategies and recommendations. In 2014, CARB revised the target using the GWP values from the IPCC AR4 and determined that the 1990 GHG emissions inventory and 2020 GHG emissions limit is 431 MMTCO₂e. CARB also updated the State's 2020 NAT emissions estimate to account for the effect of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions required by regulation that were recently adopted for motor vehicles and renewable energy. CARB's projected statewide 2020 emissions estimate using the GWP values from the IPCC AR4 is 509.4 MMTCO₂e.

2017 Climate Change Scoping Plan

In response to the 2030 GHG reduction target, CARB adopted the 2017 Climate Change Scoping Plan at a public meeting held in December 2017. The 2017 Scoping Plan outlines the strategies the State will implement to achieve the 2030 GHG reduction target of 40 percent below 1990 levels. The 2017 Scoping Plan also addresses GHG emissions from natural and working lands of California, including the agriculture and forestry sectors. The 2017 Scoping Plan considered the Scoping Plan Scenario and four alternatives for achieving the required GHG reductions but ultimately selected the Scoping Plan Scenario.

CARB states that the Scoping Plan Scenario “is the best choice to achieve the State's climate and clean air goals.”²³ Under the Scoping Plan Scenario, the majority of the reductions would result from the continuation of the Cap-and-Trade regulation. Additional reductions are achieved from electricity sector standards (i.e., utility providers to supply at least 50 percent renewable electricity by 2030), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the mobile source strategy and sustainable freight action plan. The alternatives were designed to consider various combinations of these programs, as well as consideration of a carbon tax in the event the Cap-and-Trade regulation is not continued. However, in July 2017, the California Legislature voted to extend the Cap-and-Trade regulation to 2030. Implementing this Scoping Plan will ensure that California's climate actions continue to promote innovation, drive the generation of new jobs, and achieve continued reductions of smog and air toxics. The ambitious approach draws on a decade of successful programs that address the major sources of climate-changing gases in every sector of the economy:

²³ California Air Resources Board, California's 2017 Climate Change Scoping Plan, November 2017, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

- **More Clean Cars and Trucks:** The plan sets out far-reaching programs to incentivize the sale of millions of zero-emission vehicles, drive the deployment of zero-emission trucks, and shift to a cleaner system of handling freight statewide.
- **Increased Renewable Energy:** California's electric utilities are ahead of schedule meeting the requirement that 33 percent of electricity come from renewable sources by 2020. The Scoping Plan guides utilities to 50 percent renewables, as required under SB 350.
- **Slashing Super-Pollutants:** The plan calls for a significant cut in super-pollutants such as methane and HFC refrigerants, which are responsible for as much as 40 percent of global warming.
- **Cleaner Industry and Electricity:** California's renewed cap-and-trade program extends the declining cap on emissions from utilities and industries and the carbon allowance auctions. The auctions will continue to fund investments in clean energy and efficiency, particularly in disadvantaged communities.
- **Cleaner Fuels:** The Low Carbon Fuel Standard will drive further development of cleaner, renewable transportation fuels to replace fossil fuels.
- **Smart Community Planning:** Local communities will continue developing plans which will further link transportation and housing policies to create sustainable communities.
- **Improved Agriculture and Forests:** The Scoping Plan also outlines innovative programs to account for and reduce emissions from agriculture, as well as forests and other natural lands.

The 2017 Scoping Plan also evaluates reductions of smog-causing pollutants through California's climate programs.

2022 Climate Change Scoping Plan

CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality on November 16, 2022. The 2022 Scoping Plan lays out the sector-by-sector roadmap for California, the world's fifth largest economy, to achieve carbon neutrality by 2045 or earlier, outlining a technologically feasible, cost-effective, and equity-focused path to achieve the state's climate target. The Plan addresses recent legislation and direction from Governor Newsom and extends and expands upon earlier plans with a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. The plan also takes the unprecedented step of adding carbon neutrality as a science-based guide and touchstone for California's climate work. Specifically, this plan:

- (2) Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- (3) Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- (4) Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- (5) Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- (6) Incorporates the contribution of natural and working lands (NWL) to the state's GHG emissions, as well as their role in achieving carbon neutrality.
- (7) Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- (8) Evaluates the substantial health and economic benefits of taking action.
- (9) Identifies key implementation actions to ensure success.

SB 32, Pavley. California Global Warming Solutions Act of 2006

- (5) The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. The state board is required to approve a statewide greenhouse gas emissions limit equivalent to the statewide

greenhouse gas emissions level in 1990 to be achieved by 2020 and to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective greenhouse gas emissions reductions. This bill would require the state board to ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030.

- (2) This bill would become operative only if AB 197 of the 2015–16 Regular Session is enacted and becomes effective on or before January 1, 2017. AB 197 requires that the California Air Resources Board, which directs implementation of emission-reduction programs, should target direct reductions at both stationary and mobile sources. AB 197 of the 2015-2016 Regular Session was approved on September 8, 2016.

Senate Bill 1368

Senate Bill 1368 (SB 1368) is the companion Bill of AB 32 and was adopted September, 2006. SB 1368 requires the California Public Utilities Commission (CPUC) to establish a performance standard for baseload generation of GHG emissions by investor-owned utilities by February 1, 2007, and for local publicly owned utilities by June 30, 2007. These standards could not exceed the GHG emissions rate from a baseload combined-cycle, natural gas-fired plant. Furthermore, the legislation states that all electricity provided to the State, including imported electricity, must be generated by plants that meet the standards set by California Public Utilities Commission (CPUC) and California Energy Commission (CEC).

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 Order also directs the 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.

On April 23, 2009 CARB approved the proposed regulation to implement the low carbon fuel standard and began implementation on January 1, 2011. The low carbon fuel standard is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. CARB approved some amendments to the LCFS in December 2011, which were implemented on January 1, 2013. In September 2015, the Board approved the re-adoption of the LCFS, which became effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted. In 2018, the Board approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

The LCFS is designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and therefore, reduce GHG emissions and decrease petroleum dependence in the transportation sector. Separate standards are established for gasoline and diesel fuels and the alternative fuels that can replace each. The standards are “back-loaded”, with more reductions required in the last five years, than during the first five years. This schedule allows for the development of advanced fuels that are lower in carbon than today's fuels and the market penetration of plug-in hybrid electric vehicles, battery electric vehicles, fuel cell vehicles, and flexible fuel vehicles. It is anticipated that compliance with the low carbon fuel standard will be based on a combination of both lower carbon fuels and more efficient vehicles.

Reformulated gasoline mixed with corn-derived ethanol at ten percent by volume 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 as appropriate. 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 for the low carbon fuel standard.

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 address GHG emissions. The CEQA Guidelines Amendments changed 14 sections of the CEQA Guidelines and incorporate GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance were provided and no specific mitigation measures were identified. The GHG emission reduction amendments went into effect on March 18, 2010, and are summarized below:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas 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 greenhouse gas 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 (EIRs) must specifically consider a project's energy use and energy efficiency potential.

Senate Bill 100

Senate Bill 100 (SB 100) requires 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. SB 100 was adopted September 2018.

The interim thresholds from prior Senate Bills and Executive Orders would also remain in effect. These include Senate Bill 1078 (SB 1078), which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 (SB 107) which changed the target date to 2010. Executive Order S-14-08, which was signed on November 2008 and expanded the State's Renewable Energy Standard to 33 percent renewable energy by 2020. Executive Order S-21-09 directed the CARB to adopt regulations by July 31, 2010 to enforce S-14-08. Senate Bill X1-2 codifies the 33 percent renewable energy requirement by 2020.

Senate Bill 375

Senate Bill 375 (SB 375) was adopted September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPO's Regional Transportation Plan (RTP). The CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. The CARB is also charged with reviewing each MPO's sustainable communities strategy or alternate planning strategy for consistency with its assigned targets.

The proposed project is located within the Southern California Association of Governments (SCAG) jurisdiction, which has authority to develop the SCS or APS. For the SCAG region, the targets set by the CARB are at eight percent below 2005 per capita GHG emissions levels by 2020 and 19 percent below 2005 per capita GHG emissions levels by 2035. These reduction targets became effective October 2018.

Senate Bill X7-7

Senate Bill X7-7 (SB X7-7), enacted on November 9, 2009, mandates water conservation targets and efficiency improvements for urban and agricultural water suppliers. SB X7-7 requires the Department of Water Resources (DWR) to develop a task force and technical panel to develop alternative best management practices for the water sector. In addition, SB X7-7 required the DWR to develop criteria for baseline uses for residential, commercial, and industrial uses for both indoor and landscaped area uses. The DWR was also required to develop targets and regulations that achieve a statewide 20 percent reduction in water usage.

Assembly Bill 939 and Senate Bill 1374

Assembly Bill 939 (AB 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.

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 standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008, and Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009. CalEEMod modeling defaults to 2008 standards. 2013 Standards were approved and have been effective since July 1, 2014. 2016 Standards were adopted January 1, 2017. 2019 standards were published July 1, 2019 and became effective January 1, 2020. The 2016 residential standards were estimated to be approximately 28 percent more efficient than the 2013 standards, whereas the 2019 residential standards are estimated to be approximately 7 percent more efficient than the 2016 standards. Furthermore, once rooftop solar electricity generation is factored in, 2019 residential standards are estimated to be approximately 53 percent more efficient than the 2016 standards. Under the 2019 standards, nonresidential buildings are estimated to be approximately 30 percent more efficient than the 2016 standards. Energy efficient buildings

require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions.

Per Section 100 Scope, the 2019 Title 24, Part 6 Building Code now requires healthcare facilities, such as assisted living facilities, hospitals, and nursing homes, to meet documentation requirements of Title 24, Part 1 Chapter 7 – Safety Standards for Health Facilities. A healthcare facility is defined as any building or portion thereof licensed pursuant to California Health and Safety Code Division 2, Chapter 1, Section 1204 or Chapter 2, Section 1250.

Section 120.1 Ventilation and Indoor Air Quality included both additions and revisions in the 2019 Code. This section now requires nonresidential and hotel/motel buildings to have air filtration systems that use forced air ducts to supply air to occupiable spaces to have air filters. Further, the air filter efficiency must be either MERV 13 or use a particle size efficiency rating specific in the Energy Code AND be equipped with air filters with a minimum 2-inch depth or minimum 1-inch depth if sized according to the equation 120.1-A. If natural ventilation is to be used the space must also use mechanical unless ventilation openings are either permanently open or controlled to stay open during occupied times. The 2019 version of the Code also completely revised the minimum ventilation requirements including DVC airflow rates within Section 120.1 Table 120.1-A. Table 120.1-A now includes air classification and recirculation limitations, these are based on either the number of occupants or the CFM/ft² (cubic feet per minute per square foot), whichever is greater.

Section 120.1 Ventilation and Indoor Air Quality also included additions for high-rise residential buildings. Requirements include that mechanical systems must provide air filters that and that air filters must be MERV 13 or use a particle size efficiency rating specified in the Energy Code. Window operation is no longer a method allowed to meet ventilation requirements, continuous operation of central forced air system handlers used in central fan integrated ventilation system is not a permissible method of providing the dwelling unit ventilation airflow, and central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow to each dwelling unit. In addition, requirements for kitchen range hoods were also provided in the updated Section 120.1.

Per Section 120.1(a) healthcare facilities must be ventilated in accordance with Chapter 4 of the California Mechanical Code and are NOT required to meet the ventilations requirements of Title 24, Part 6.

Section 140.4 Space Conditioning Systems included both additions and revisions within the 2019 Code. The changes provided new requirements for cooling tower efficiency, new chilled water-cooling system requirements, as well as new formulas for calculating allowed fan power. Section 140.4(n) also provide a new exception for mechanical system shut-offs for high-rise multifamily dwelling units, while Section 140.4(o) added new requirements for conditioned supply air being delivered to space with mechanical exhaust.

Section 120.6 Covered Processes added information in regards to adiabatic chiller requirements that included that all condenser fans for air-cooled converseness, evaporative-cooled condensers, adiabatic condensers, gas coolers, air or water fluid coolers or cooling towers must be continuously variable speed, with the speed of all fans serving a common condenser high side controlled in unison .Further, the mid-condensing setpoint must be 70 degrees Fahrenheit for all of the above mentioned systems.

New regulations were also adopted under Section 130.1 Indoor Lighting Controls. These included new exceptions being added for restrooms, the exception for classrooms being removed, as well as exceptions in regard to sunlight provided through skylights and overhangs.

Section 130.2 Outdoor Lighting Controls and Equipment added automatic scheduling controls which included that outdoor lighting power must be reduced by 50 to 90 percent, turn the lighting off during unoccupied times and have at least two scheduling options for each luminaire independent from each other and with a 2-hour override function. Furthermore, motion sensing controls must have the ability to reduce power within 15 minutes of area being vacant and be able to come back on again when occupied. An exception allows for lighting subject to a health or life safety statute, ordinance, or regulation may have a minimum time-out period

longer than 15 minutes or a minimum dimming level above 50% when necessary to comply with the applicable law.

The 2022 Building Energy Efficiency Standards became effective on January 1, 2023.²⁴ All buildings for which an application for a building permit is submitted on or after January 1, 2023 must follow the 2022 standards. The core focus of the building standards has been efficiency, but the 2019 Energy Code ventured into onsite generation by requiring solar PV on new homes, providing significant GHG savings. The 2022 update builds off this progress with expanded solar standards and the move to onsite energy storage that will help Californians save on utility bills while bolstering the grid. The 2022 Energy Code update focuses on four key areas in new construction of homes and businesses:

- (10) Encouraging electric heat pump technology and use, which consumes less energy and produces fewer emissions than traditional HVACs and water heaters.
- (11) Establishing electric-ready requirements when natural gas is installed, which positions owners to use cleaner electric heating, cooking and electric vehicle (EV) charging options whenever they choose to adopt those technologies.
- (12) Expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the state's progress toward a 100 percent clean electricity grid.
- (13) Strengthening ventilation standards to improve indoor air quality.

The 2022 Energy Code affects homes by establishing energy budgets based on efficient heat pumps for space or water heating to encourage builders to install heat pumps over gas-fueled HVAC units; requiring homes to be electric-ready, with dedicated 240-volt outlets and space (with plumbing for water heaters) so electric appliances can eventually replace installed gas appliances; increasing minimum kitchen ventilation requirements so that fans over cooktops have higher airflow or capture efficiency to better exhaust pollution from gas cooking and improve indoor air quality; and allowing exceptions to existing solar PV standards when roof area is not available (such as for smaller homes). In addition, the effect on businesses includes establishing combined solar PV and battery standards for select businesses with systems being sized to maximize onsite use of solar energy and avoid electricity demand during times when the grid must use gas-powered plants; establishing new efficiency standards for commercial greenhouses (primarily cannabis growing); and improving efficiency standards for building envelope, various internal systems, and grid integration equipment, such as demand-responsive controls to buoy grid stability.^{25,26}

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

On January 12, 2010, the State Building Standards Commission unanimously adopted updates to the California Green Building Standards Code, which went into effect on January 1, 2011.

2016 CALGreen Code: The 2016 residential standards are estimated to be approximately 28 percent more efficient than the 2013 standards. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions. During the 2016-2017 fiscal year, the Department of Housing and Community Development (HCD) updated CALGreen through the 2015 Triennial Code Adoption Cycle.

HCD also increased the required construction waste reduction from 50 percent to 65 percent of the total building site waste. This increase aids in meeting CalRecycle's statewide solid waste recycling goal of 75 percent for 2020 as stated in Chapter 476, Statutes of 2011 (AB 341). HCD adopted new regulations requiring recycling areas for multifamily projects of five or more dwelling units. This regulation requires

²⁴ California Energy Commission (CEC). 2022. Building Energy Efficiency Standards. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency>.

²⁵ <https://www.lightnowblog.com/2021/08/california-energy-commission-adopts-2022-building-energy-efficiency-standards/>

²⁶ State of California Energy Commission. 2022 Building Energy Efficiency Standards Summary. https://www.energy.ca.gov/sites/default/files/2021-08/CEC_2022_EnergyCodeUpdateSummary_ADA.pdf

developers to provide readily accessible areas adequate in size to accommodate containers for depositing, storage and collection of non-hazardous materials (including organic waste) for recycling. This requirement assists businesses that were required as of April 1, 2016, to meet the requirements of Chapter 727, Statutes of 2014 (AB 1826).

HCD adopted new regulations to require information on photovoltaic systems and electric vehicle chargers to be included in operation and maintenance manuals. Currently, CALGreen section 4.410.1 Item 2(a) requires operation and maintenance instructions for equipment and appliances. Photovoltaic systems and electric vehicle chargers are systems that play an important role in many households in California, and their importance is increasing every day. HCD incorporated these two terms in the existing language in order to provide clarity to code users as to additional systems requiring operation and maintenance instructions.

HCD updated the reference to Clean Air Standards of the United States Environmental Protection Agency applicable to woodstoves and pellet stoves. HCD also adopted a new requirement for woodstoves and pellet stoves to have a permanent label indicating they are certified to meet the emission limits. This requirement provides clarity to the code user and is consistent with the United States Environmental Protection Agency's New Source Performance Standards. HCD updated the list of standards which can be used for verification of compliance for exterior grade composite wood products. This list now includes four standards from the Canadian Standards Association (CSA): CSA O121, CSA O151, CSA O153 and CSA O325. HCD updated heating and air-conditioning system design references to the ANSI/ACCA 2 Manual J, ANSI/ACCA 1 Manual D, and ANSI/ACCA 3 Manual S to the most recent versions approved by ANSI. HCD adopted a new elective measure for hot water recirculation systems for water conservation. The United States Department of Energy estimates that 3,600 to 12,000 gallons of water per year can be saved by the typical household (with four points of hot water use) if a hot water recirculation system is installed.

2019 CALGreen Code: During the 2019-2020 fiscal year, the Department of Housing and Community Development (HCD) updated CALGreen through the 2019 Triennial Code Adoption Cycle.

HCD modified the best management practices for stormwater pollution prevention adding Section 5.106.2 for projects that disturb one or more acres of land. This section requires projects that disturb one acre or more of land or less than one acre of land but are part of a larger common plan of development or sale must comply with the postconstruction requirement detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board. The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff pre-project hydrology) with installation of postconstruction stormwater management measures.

HCD added sections 5.106.4.1.3 and 5.106.4.1.5 in regard to bicycle parking. Section 5.106.4.1.3 requires new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility. In addition, Section 5.106.4.1.5 states that acceptable bicycle parking facility for Sections 5.106.4.1.2 through 5.106.4.1.4 shall be convenient from the street and shall meeting one of the following: (1) covered, lockable enclosures with permanently anchored racks for bicycles; (2) lockable bicycle rooms with permanently anchored racks; or (3) lockable, permanently anchored bicycle lockers.

HCD amended section 5.106.5.3.5 allowing future charging spaces to qualify as designated parking for clean air vehicles.

HCD updated section 5.303.3.3 in regard to showerhead flow rates. This update reduced the flow rate to 1.8 GPM.

HCD amended section 5.304.1 for outdoor potable water use in landscape areas and repealed sections 5.304.2 and 5.304.3. The update requires nonresidential developments to comply with a local water efficient landscape ordinance or the current California Department of Water Resource's' Model Water Efficient

Landscape Ordinance (MWELo), whichever is more stringent. Some updates were also made in regard to the outdoor potable water use in landscape areas for public schools and community colleges.

HCD updated Section 5.504.5.3 in regard to the use of MERV filters in mechanically ventilated buildings. This update changed the filter use from MERV 8 to MERV 13. MERV 13 filters are to be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15. Therein, the Governor directed the following:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.
- Ordered all state agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

Executive Order B-29-15

Executive Order B-29-15, mandates a statewide 25 percent reduction in potable water usage. EO B-29-15 signed into law on April 1, 2015.

Executive Order B-37-16

Executive Order B-37-16, continuing the State's adopted water reductions, was signed into law on May 9, 2016. The water reductions build off the mandatory 25 percent reduction called for in EO B-29-15.

Executive Order N-79-20

Executive Order N-79-20 Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new zero emission vehicles (ZEVs) "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

SBX1 2

Signed into law in April 2011, SBX1 2, requires one-third of the State's electricity to come from renewable sources. The legislation increases California's current 20 percent renewables portfolio standard target in 2010 to a 33 percent renewables portfolio standard by December 31, 2020.

Senate Bill 350

Signed into law October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard (RPS) eligible resources, including solar, wind, biomass, geothermal, and others. In addition, SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. To help ensure these goals are met and the greenhouse gas emission reductions are realized, large utilities will be required to develop and submit Integrated Resource Plans (IRPs). These IRPs will detail how each entity will meet their customers resource needs, reduce greenhouse gas emissions and ramp up the deployment of clean energy resources.

Governor Newsom's September 2022 Climate Legislation

On September 16, 2022, California enacted some of the nation's most aggressive climate measures in history as Governor Gavin Newsom signed a sweeping package of legislation to cut pollution, protect Californians from big polluters, and accelerate the state's transition to clean energy. The Governor partnered with legislative leaders to advance groundbreaking measures to achieve carbon neutrality no later than 2045 and 90 percent clean energy by 2035, establish new setback measures protecting communities from oil drilling, capture carbon pollution from the air, advance nature-based solutions, and more.

Over the next two decades, the California Climate Commitment will:

- Create 4 million new jobs
- Cut air pollution by 60 percent
- Reduce state oil consumption by 91 percent
- Save California \$23 billion by avoiding the damages of pollution
- Reduce fossil fuel use in buildings and transportation by 92 percent
- Cut refinery pollution by 94 percent²⁷

The following describes a few of the many bills signed in through the Governor's climate package.

Assembly Bill 1279

Establishes a clear, legally binding, and achievable goal for California to achieve statewide carbon neutrality as soon as possible, and no later than 2045, and establishes an 85% emissions reduction target as part of that goal.

Senate Bill 1137

Establishes a setback distance of 3,200 feet between any new oil well and homes, schools, parks or businesses open to the public. Ensures comprehensive pollution controls for existing oil wells within 3,200 feet of these facilities.

Senate Bill 1020

Creates clean electricity targets of 90 percent by 2035 and 95 percent by 2040 with the intent of advancing the state's trajectory to the existing 100 percent clean electricity retail sales by 2045 goal.

²⁷ <https://www.gov.ca.gov/2022/09/16/governor-newsom-signs-sweeping-climate-measures-ushering-in-new-era-of-world-leading-climate-action/>

Senate Bill 905

Establishes a clear regulatory framework for carbon removal and carbon capture, utilization and sequestration. Bans the practice of injecting carbon dioxide for the purpose of enhanced oil recovery.

Assembly Bill 1757

Requires the state to develop an achievable carbon removal target for natural and working lands.

Energy Sector and CEQA Guidelines Appendix F

The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2016 update to the Energy Efficiency Standards for Residential and Nonresidential Buildings focuses on several key areas to improve the energy efficiency of renovations and addition to existing buildings as well as newly constructed buildings and renovations and additions to existing buildings. The major efficiency improvements to the residential Standards involve improvements for attics, walls, water heating, and lighting, whereas the major efficiency improvements to the nonresidential Standards include alignment with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2013 national standards. Furthermore, the 2016 update requires that enforcement agencies determine compliance with CCR, Title 24, Part 6 before issuing building permits for any construction.²⁸

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.”²⁹ As of January 1, 2011, the CALGreen Code is mandatory for all new buildings constructed in the state. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2022 to include new mandatory measures for residential and nonresidential uses; the new measures took effect on January 1, 2023.

Regional – South Coast Air Quality Management District

The project is within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SCAQMD Regulation XXVII, Climate Change

SCAQMD Regulation XXVII currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.

²⁸ California Energy Commission, 2016 Building Energy Efficiency Standards, June 2015, <http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf>

²⁹ California Building Standards Commission, 2010 California Green Building Standards Code, (2010).

- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified greenhouse gas emission reductions in the SCAQMD.
- Rule 2702, Greenhouse Gas Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a Greenhouse Gas Reduction Program for greenhouse gas emission reductions in the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

A variety of agencies have developed greenhouse gas emission thresholds and/or have made recommendations for how to identify a threshold. However, the thresholds for projects in the jurisdiction of the SCAQMD remain in flux. The California Air Pollution Control Officers Association explored a variety of threshold approaches but did not recommend one approach (2008). The CARB recommended approaches for setting interim significance thresholds (California Air Resources Board 2008b), in which a draft industrial project threshold suggests that non-transportation related emissions under 7,000 MTCO₂e per year would be less than significant; however, the CARB has not approved those thresholds and has not published anything since then. The SCAQMD is in the process of developing thresholds, as discussed below.

SCAQMD Threshold Development

On December 5, 2008, the SCAQMD Governing Board adopted an interim greenhouse gas significance threshold for stationary sources, rules, and plans where the SCAQMD is lead agency (SCAQMD permit threshold). The SCAQMD permit threshold consists of five tiers. However, the SCAQMD is not the lead agency for this project. Therefore, the five permit threshold tiers do not apply to the proposed project.

The SCAQMD is in the process of preparing recommended significance thresholds for greenhouse gases for local lead agency consideration ("SCAQMD draft local agency threshold"); however, the SCAQMD Board has not approved the thresholds as of the date of the Notice of Preparation. The current draft thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:
 - All land use types: 3,000 MTCO₂e per year
 - Based on land use type: residential: 3,500 MTCO₂e per year; commercial: 1,400 MTCO₂e per year; or mixed use: 3,000 MTCO₂e per year.
 - Based on land type: Industrial (where SCAQMD is the lead agency), 10,000 MTCO₂e per year.
- Tier 4 has the following options:
 - Option 1: Reduce emissions from business as usual (BAU) by a certain percentage; this percentage is currently undefined.
 - Option 2: Early implementation of applicable AB 32 Scoping Plan measures.
 - Option 3, 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO₂e/SP/year for projects and 6.6 MTCO₂e/SP/year for plans;
 - Option 3, 2035 target: 3.0 MTCO₂e/SP/year for projects and 4.1 MTCO₂e/SP/year for plans.
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap carbon dioxide concentrations at 450 ppm, thus stabilizing global climate. Specifically, the Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to a CEQA analysis, including a negative declaration, a mitigated negative declaration, or an environmental impact report, which includes analyzing feasible alternatives and imposing feasible mitigation measures. A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that staff estimates that these GHG emissions would account for slightly less than one percent of future 2050 statewide GHG emissions target (85 MMTCO₂eq/year). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to BACT for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility.

SCAQMD Working Group

Since neither the CARB nor the OPR has developed GHG emissions threshold, the SCAQMD formed a Working Group to develop significance thresholds related to GHG emissions. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 10,000 MTCO₂e for industrial uses.

In order to assist local agencies with direction on GHG emissions, the SCAQMD organized a working group and adopted Rules 2700, 2701, 2702, and 3002 which are described below.

SCAQMD Rules 2700 and 2701

The SCAQMD adopted Rules 2700 and 2701 on December 5, 2008, which establishes the administrative structure for a voluntary program designed to quantify GHG emission reductions. Rule 2700 establishes definitions for the various terms used in Regulation XXVII – Global Climate Change. Rule 2701 provides specific protocols for private parties to follow to generate certified GHG emission reductions for projects within the district. Approved protocols include forest projects, urban tree planting, and manure management. The SCAQMD is currently developing additional protocols for other reduction measures. For a GHG emission reduction project to qualify, it must be verified and certified by the SCAQMD Executive Officer, who has 60 days to approve or deny the Plan to reduce GHG emissions. Upon approval of the Plan, the Executive Officer issues required to issue a certified receipt of the GHG emission reductions within 90 days.

SCAQMD Rule 2702

The SCAQMD adopted Rule 2702 on February 6, 2009, which establishes a voluntary air quality investment program from which SCAQMD can collect funds from parties that desire certified GHG emission reductions, pool those funds, and use them to purchase or fund GHG emission reduction projects within two years, unless extended by the Governing Board. Priority will be given to projects that result in co-benefit emission reductions of GHG emissions and criteria or toxic air pollutants within environmental justice areas. Further, this voluntary program may compete with the cap-and-trade program identified for implementation in CARB's Scoping Plan, or a federal cap and trade program.

SCAQMD Rule 3002

The SCAQMD amended Rule 3002 on November 5, 2010 to include facilities that emit greater than 100,000 tons per year of CO₂e are required to apply for a Title V permit by July 1, 2011. A Title V permit is for facilities that are considered major sources of emissions.

Local – City of Torrance

In December 2017, the City of Torrance adopted the City of Torrance Climate Action Plan (CAP). The Climate Action Plan is a guide which sets greenhouse gas emission reduction goals and establishes strategies to achieve these outcomes. The strategies included in the CAP are voluntary, however the City has committed to the targets outlined in the CAP. The CAP identifies community-wide strategies to lower GHG emissions from a range of sources within the jurisdiction, including transportation, land use, energy generation and consumption, water, and waste. The CAP reduction targets are consistent with California's AB 32 goals and will help the State meet its long-term goal of 80 percent below 1990 levels by 2050. The City's reduction targets include a 15 percent reduction from 2005 levels by 2020 and a 49 percent reduction from 2005 levels by 2035.

SIGNIFICANCE THRESHOLDS

Appendix G of State CEQA Guidelines

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

- The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
- The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.³⁰

Thresholds of Significance for this Project

To determine whether the project's GHG emissions are significant, this analysis uses the SCAQMD draft tier 3 screening threshold of 3,000 MTCO₂e per year for all land uses.

METHODOLOGY

The proposed project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste, water, and construction equipment. The following provides the methodology used to calculate the project-related GHG emissions and the project impacts.

CalEEMod Version 2022.1.1.29 was used to calculate the GHG emissions from the proposed project. The CalEEMod Output for year 2027 is available in Appendix B. Each source of GHG emissions is described in greater detail below.

³⁰ The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

Area Sources

Area sources include emissions from consumer products, landscape equipment and architectural coatings. No changes were made to the default area source emissions.

Energy Usage

Energy usage includes emissions from the generation of electricity and natural gas used on-site. No changes were made to the default energy usage parameters.

Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project have been analyzed by inputting the project-generated trip generation from the TIA into the CalEEMod Model. The program then applies the emission factors for each trip which is provided by the EMFAC2021 model to determine the vehicular traffic pollutant emissions. See Section 2 for details.

Offroad Sources

Offroad sources include emissions from the use of five electric forklifts, 6 hours a day, 5 days a week and one, 200 HP diesel yard goat run for 4 hours a day, 5 days a week.

Stationary Sources

Stationary sources include emissions from the occasional use/testing of a 745 HP emergency back-up diesel generator run for 0.5 hours per day, 12 hours a year, and 300 HP diesel emergency fire pump with 10 HP jockey pump run for 0.5 hours per day, 26 hours a year.

Waste

Waste includes the GHG emissions generated from the processing of waste from the proposed project as well as the GHG emissions from the waste once it is interred into a landfill. AB 341 required that 75 percent of waste be diverted from landfills by 2020. No changes were made to the default waste parameters.

Water

Water includes the water used for the interior of the building as well as for landscaping and is based on the GHG emissions associated with the energy used to transport and filter the water. CALGreen standards require that indoor water use be reduced by 20 percent. The project is also required to use water-efficient irrigation. No changes were made to the default water usage parameters.

Construction

The construction-related GHG emissions were also included in the analysis and were based on a 30-year amortization rate as recommended in the SCAQMD GHG Working Group meeting on November 19, 2009. The construction-related GHG emissions were calculated by CalEEMod and are detailed above.

PROJECT GREENHOUSE GAS EMISSIONS

The GHG emissions have been calculated based on the parameters described above. A summary of the results is shown below in Table 22 and the CalEEMod Model run for the proposed project is provided in Appendix B. Table 22 shows that the total for the proposed project's emissions (without credit for any reductions from

sustainable design and/or regulatory requirements) would be 1,515.79 MTCO₂e per year. According to the thresholds of significance established above, a cumulative global climate change impact would occur if the GHG emissions created from the on-going operations of the proposed project would exceed the SCAQMD draft threshold of 3,000 MTCO₂e per year for all land uses. Therefore, as the total emissions for the proposed project would not exceed the SCAQMD draft screening threshold of 3,000 MTCO₂e per year, the proposed project would not create a significant cumulative impact to global climate change.

Table 22
Project-Related Greenhouse Gas Emissions

Category	Greenhouse Gas Emissions (Metric Tons/Year)					
	Bio-CO ₂	NonBio-CO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Maximum Annual Operations	45.10	1,290.30	1,335.40	4.66	0.06	1,478.40
Construction ¹	0.00	36.68	36.68	0.00	0.00	37.39
Total Emissions	45.10	1,326.98	1,372.08	4.66	0.07	1,515.79
SCAQMD Draft Screening Threshold						3,000
Exceeds Threshold?						No

Notes:

Source: CalEEMod Version 2022.1.1.29 for Opening Year 2027.

(1) Construction GHG emissions CO₂e based on a 30-year amortization rate.

CONSISTENCY WITH APPLICABLE GREENHOUSE GAS REDUCTION PLANS AND POLICIES

The proposed project could have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. As stated previously, the applicable plan for the proposed project is the City of Torrance Climate Action Plan. The City of Torrance has selected goals to reduce its community GHG emissions to a level that is 15 percent below its 2005 GHG emissions level by 2020 and 49 percent below its 2005 levels by 2035.

As stated previously, the SCAQMD's tier 3 thresholds used Executive Order S-3-05 goal as the basis for deriving the screening level. The California Governor issued Executive Order S-3-05, GHG Emission, in June 2005, 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.

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 was phased in starting in 2012.

Therefore, as the project's emissions meet the threshold for compliance with Executive Order S-3-05, the project's emissions also comply with the goals of AB 32 and the City of Torrance Climate Action Plan. Additionally, as the project meets the current interim emissions targets/thresholds established by SCAQMD, the project would also be on track to meet the reduction target of 40 percent below 1990 levels by 2030 mandated by SB-32. Furthermore, the majority of the post 2020 reductions in GHG emissions are addressed via regulatory requirements at the State level and the project will be required to comply with these regulations as they come into effect.

At a level of 1,515.79 MTCO₂e per year, the project's GHG emissions do not exceed the SCAQMD draft threshold of 3,000 MTCO₂e per year and is in compliance with the goals of the City of Torrance Climate Action Plan, AB-32 and SB-32. Furthermore, the project will comply with applicable Green Building Standards and City of Torrance's policies regarding sustainability (as dictated by the City's General Plan). Impacts are considered to be less than significant.

CUMULATIVE GREENHOUSE GAS IMPACTS

Although the project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. Therefore, in the case of global climate change, the proximity of the project to other GHG emission generating activities is not directly relevant to the determination of a cumulative impact because climate change is a global condition. According to CAPCOA, "GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective."³¹ The resultant consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change.

The state has mandated a goal of reducing statewide emissions to 1990 levels by 2020, even though statewide population and commerce are predicted to continue to expand. In order to achieve this goal, CARB is in the process of establishing and implementing regulations to reduce statewide GHG emissions. Consistent with

³¹ Source: California Air Pollution Control Officers Association, CEQA & Climate change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, (2008).

CEQA Guidelines Section 15064h(3),³² the City, as lead agency, has determined that the project's contribution to cumulative GHG emissions and global climate change would be less than significant if the project is consistent with the applicable regulatory plans and policies to reduce GHG emissions.

As discussed in the "Consistency With Applicable Greenhouse Gas Reduction Plans and Policies" section above, the project is consistent with the goals and objectives of the City of Torrance Climate Action Plan.

Thus, given the project's consistency with the SCAQMD's 3,000 MTCO₂e per year draft threshold for all land uses, the project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Given this consistency, it is concluded that the project's incremental contribution to greenhouse gas emissions and their effects on climate change would not be cumulatively considerable.

³² The State CEQA Guidelines were amended in response to SB 97. In particular, the State CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction program renders a cumulative impact insignificant. Per State CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions."

5. ENERGY ANALYSIS

EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the project area and region.

Overview

California's estimated annual energy use as of 2023 included:

- Approximately 281,140 gigawatt hours of electricity;³³
- Approximately 2,087,461 million cubic feet of natural gas per year;³⁴ and
- Approximately 23.2 billion gallons of transportation fuel (for the year 2015).³⁵

As of 2022, the year of most recent data currently available by the United States Energy Information Administration (EIA), energy use in California by demand sector was:

- Approximately 42.6 percent transportation;
- Approximately 22.5 percent industrial;
- Approximately 17.6 percent residential; and
- Approximately 17.4 percent commercial.³⁶

California's electricity in-state generation system generates approximately 215,623 gigawatt-hours each year. In 2023, California produced approximately 77 percent of the electricity it uses; the rest was imported from the Pacific Northwest (approximately 6 percent) and the U.S. Southwest (approximately 18 percent). Natural gas is the main source for electricity generation at approximately 43.68 percent of the total in-state electric generation system power as shown in Table 23.

A summary of and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below:

- In 2023, California was the seventh-largest producer of crude oil among the 50 states, and, the state ranked third in crude oil refining capacity.
- California is the largest consumer of jet fuel and second-largest consumer of motor gasoline among the 50 states.
- California was the second-largest total energy consumer among the states, after Texas, but its per capita energy consumption is the fourth lowest in the nation.
- In 2023, renewable resources, including hydroelectric power and small-scale solar power, supplied 54% of California's in-state electricity generation. Natural gas fueled another 39% and nuclear power supplied almost all the rest.
- In 2023, California was the fourth-largest electricity producer in the nation. It is also the nation's third-largest electricity consumer and imports more electricity than any other state.³⁷

³³ California Energy Commission. Energy Almanac. Total Electric Generation. [Online] 2023. 2023 Total System Electric Generation (ca.gov).

³⁴ Natural Gas Consumption by End Use. U.S. Energy Information Administration. [Online] 2023. https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm.

³⁵ California Energy Commission. Revised Transportation Energy Demand Forecast 2018-2030. [Online] 2021. <https://www.energy.ca.gov/data-reports/planning-and-forecasting>

³⁶ U.S. Energy Information Administration. California Energy Consumption by End-Use Sector, 2021. California State Profile Overview.[Online] January 8, 2023 <https://www.eia.gov/state/?sid=CA#tabs-2>

³⁷ State Profile Overview. [Online] [Cited: April 20, 2023.] <https://www.eia.gov/state/?sid=CA#tabs-2>

As indicated above, California is one of the nation's leading energy-producing states, and California per capita energy use is among the nation's most efficient. Given the nature of the proposed project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the project—namely, electricity and natural gas, and transportation fuel for vehicle trips associated with the proposed project.

Electricity

Electricity would be provided to the project by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons, within a service area encompassing approximately 50,000 square miles.³⁸ SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers.³⁹

Table 24 identifies SCE's specific proportional shares of electricity sources in 2023. As shown in Table 24, the 2023 SCE Power Mix has renewable energy at 37.6 percent of the overall energy resources, of which biomass and waste is at 0.1 percent, geothermal is at 5.2 percent, eligible hydroelectric is at 0.7 percent, solar energy is at 19.8 percent, and wind power is at 11.7 percent; other energy sources include large hydroelectric at 4.5 percent, natural gas at 20 percent, nuclear at 9.1 percent, other at 0.1 percent, and unspecified sources of power at 28.8 percent.

Natural Gas

Natural gas would be provided to the project by Southern California Gas (SoCalGas). The following summary of natural gas resources and service providers, delivery systems, and associated regulation is excerpted from information provided by the California Public Utilities Commission (CPUC).

The CPUC regulates natural gas utility service for approximately 11 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller investor-owned natural gas utilities. The CPUC also regulates independent storage operators Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

The vast majority of California's natural gas customers are residential and small commercial customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

The CPUC regulates the California utilities' natural gas rates and natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering and billing.

Most of the natural gas used in California comes from out-of-state natural gas basins. In 2017, for example, California utility customers received 38% of their natural gas supply from basins located in the U.S. Southwest, 27% from Canada, 27% from the U.S. Rocky Mountain area, and 8% from production located in California.⁴⁰

³⁸ <https://www.sce.com/about-us/who-we-are/leadership/our-service-territory>

³⁹ California Energy Commission. Utility Energy Supply plans from 2015.
https://www.energy.ca.gov/almanac/electricity_data/supply_forms.html

⁴⁰ California Public Utilities Commission. Natural Gas and California. http://www.cpuc.ca.gov/natural_gas/

Transportation Energy Resources

The project would attract additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. Gasoline (and other vehicle fuels) are commercially-provided commodities and would be available to the project patrons and employees via commercial outlets.

The most recent data available shows the transportation sector emits 38 percent of the total greenhouse gases in the state and about 84 percent of smog-forming oxides of nitrogen (NOx).^{41,42} About 27 percent of total United States energy consumption in 2022 was for transporting people and goods from one place to another. In 2022, petroleum comprised about 90 percent of all transportation energy use, excluding fuel consumed for aviation and most marine vessels.⁴³ In 2022, about 135.06 billion gallons (or about 3.22 billion barrels) of finished motor gasoline were consumed in the United States, an average of about 370 million gallons (or about 8.81 million barrels) per day.⁴⁴

REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. On the state level, the PUC and the California Energy Commissions (CEC) are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

Federal Regulations

Corporate Average Fuel Economy (CAFE) Standards

First established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the “maximum feasible level” with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.⁴⁵

Issued by NHTSA and EPA in March 2020 (published on April 30, 2020 and effective after June 29, 2020), the Safer Affordable Fuel-Efficient Vehicles Rule would maintain the CAFE and CO₂ standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE and CO₂ standards for model year 2020 are 43.7 mpg and 204 grams of CO₂ per mile for passenger cars and 31.3 mpg and 284 grams of CO₂ per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. This Rule also excludes CO₂-equivalent emission improvements associated with air conditioning refrigerants and leakage (and, optionally, offsets for nitrous oxide and methane emissions) after model year 2020.⁴⁶

⁴¹ CARB. California Greenhouse Gas Emissions Inventory – 2022 Edition. <https://www.arb.ca.gov/cc/inventory/data/data.htm>

⁴² CARB. 2016 SIP Emission Projection Data. https://www.arb.ca.gov/app/emsmv/2017/emseic1_query.php?F_DIV=-4&F_YR=2012&F_SEASON=A&SP=SIP105ADJ&F_AREA=CA

⁴³ US Energy Information Administration. Use of Energy in the United States Explained: Energy Use for Transportation. https://www.eia.gov/energyexplained/?page=us_energy_transportation

⁴⁴ <https://www.eia.gov/tools/faqs/faq.php?id=23&t=10>

⁴⁵ <https://www.nhtsa.gov/lawsregulations/corporate-average-fuel-economy>.

⁴⁶ National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA), 2018. Federal Register / Vol. 83, No. 165 / Friday, August 24, 2018 / Proposed Rules, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks 2018. Available at: <https://www.gpo.gov/fdsys/pkg/FR-2018-08-24/pdf/2018-16820.pdf>.

On May 12, 2021, the National Highway Traffic Safety Administration (NHTSA) published a notice of proposed rulemaking in the Federal Register, proposing to repeal “The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program,” published Sept. 27, 2019 (SAFE I Rule), in which NHTSA codified regulatory text and made additional pronouncements regarding the preemption of state and local laws related to fuel economy standards. Specifically, this document proposed to fully repeal the regulatory text and appendices promulgated in the SAFE I Rule. In addition, this document proposed to repeal and withdraw the interpretative statements made by the Agency in the SAFE I Rule preamble, including those regarding the preemption of particular state Greenhouse Gas (GHG) Emissions standards or Zero Emissions Vehicle (ZEV) mandates. As such, this document proposed to establish a clean slate with respect to NHTSA’s regulations and interpretations concerning preemption under the Energy Policy and Conservation Act (EPCA). This action is effective as of January 28, 2022.⁴⁷

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

The Transportation Equity Act of the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

State Regulations

Integrated Energy Policy Report (IEPR)

Senate Bill 1389 requires the California Energy Commission (CEC) to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the State’s electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state’s economy; and protect public health and safety. The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2022 Integrated Energy Policy Report (2022 IEPR) was adopted in February 28, 2023. The 2022 IEPR provides updates on a variety of energy issues facing California. These issues will require action if the state is to meet its climate, energy, air quality, and other environmental goals while maintaining reliability and controlling costs. The 2022 IEPR also discusses the California Energy Commission’s equity and environmental justice efforts, its development of a more easily navigable online data platform via the California Energy Planning Library, and an update to the California Energy Demand Forecast. The report also provides

⁴⁷ <https://www.federalregister.gov/documents/2021/05/12/2021-08758/corporate-average-fuel-economy-cafe-preemption>

information on emerging topics related to energy reliability, western electricity integration, hydrogen, gasoline prices, gas transition, and distributed energy resources.⁴⁸

The 2023 Integrated Energy Policy Report (2023 IEPR) was completed in January 2024. The 2023 IEPR discusses speeding connection of clean resources to the electricity grid, the potential use of clean and renewable hydrogen, and the California Energy Demand Forecast to 2040. The report also provides updates on topics such as gas decarbonization, energy efficiency, the Clean Transportation Program, Assembly Bill 1257 (Bocanegra, Chapter 749, Statutes of 2013), and publicly owned utilities' progress toward peak demand reserves and margins.⁴⁹

State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access.

California Building Standards Code (Title 24)

The California Building Standards Code Title 24 was previously discussed in Section 3 of this report.

California Building Energy Efficiency Standards (Title 24, Part 6)

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The 2019 Title 24 standards include efficiency improvements to the lighting and efficiency improvements to the non-residential standards include alignment with the American Society of Heating and Air-Conditioning Engineers. For example, window operation is no longer a method allowed to meet ventilation requirements, continuous operation of central forced air system handlers used in central fan integrated ventilation system is not a permissible method of providing the dwelling unit ventilation airflow, and central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow to each dwelling unit. In addition, requirements for kitchen range hoods were also provided in the updated Section 120.1. Ventilation and Indoor Air Quality included both additions and revisions in the 2019 Code. This section requires nonresidential and hotel/motel buildings to have air filtration systems that use forced air ducts to supply air to occupiable spaces to have air filters. Further, the air filter efficiency must be either MERV 13 or use a particle size efficiency rating specific in the Energy Code AND be equipped with air filters with a minimum 2-inch depth or minimum 1-inch depth if sized according to the equation 120.1-A. If natural ventilation is to be used the space must also use mechanical unless ventilation openings are either permanently open or controlled to stay open during occupied times.

New regulations were also adopted under Section 130.1 Indoor Lighting Controls. These included new exceptions being added for restrooms, the exception for classrooms being removed, as well as exceptions in regard to sunlight provided through skylights and overhangs.

⁴⁸ California Energy Commission. Final 2022 Integrated Energy Policy Report. February 2023. <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2022-integrated-energy-policy-report-update>

⁴⁹ California Energy Commission. Final 2023 Integrated Energy Policy Report. January 2024. <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2023-integrated-energy-policy-report>

The 2022 Building Energy Efficiency Standards became effective on January 1, 2023.⁵⁰ All buildings for which an application for a building permit is submitted on or after January 1, 2023 must follow the 2022 standards. The core focus of the building standards has been efficiency, but the 2019 Energy Code ventured into onsite generation by requiring solar PV on new homes, providing significant GHG savings. The 2022 update builds off this progress with expanded solar standards and the move to onsite energy storage that will help Californians save on utility bills while bolstering the grid. The 2022 Energy Code update focuses on four key areas in new construction of homes and businesses:

- Encouraging electric heat pump technology and use, which consumes less energy and produces fewer emissions than traditional HVACs and water heaters.
- Establishing electric-ready requirements when natural gas is installed, which positions owners to use cleaner electric heating, cooking and electric vehicle (EV) charging options whenever they choose to adopt those technologies.
- Expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the state's progress toward a 100 percent clean electricity grid.
- Strengthening ventilation standards to improve indoor air quality.

The 2022 Energy Code affects homes by establishing energy budgets based on efficient heat pumps for space or water heating to encourage builders to install heat pumps over gas-fueled HVAC units; requiring homes to be electric-ready, with dedicated 240-volt outlets and space (with plumbing for water heaters) so electric appliances can eventually replace installed gas appliances; increasing minimum kitchen ventilation requirements so that fans over cooktops have higher airflow or capture efficiency to better exhaust pollution from gas cooking and improve indoor air quality; and allowing exceptions to existing solar PV standards when roof area is not available (such as for smaller homes). In addition, the effect on businesses includes establishing combined solar PV and battery standards for select businesses with systems being sized to maximize onsite use of solar energy and avoid electricity demand during times when the grid must use gas-powered plants; establishing new efficiency standards for commercial greenhouses (primarily cannabis growing); and improving efficiency standards for building envelope, various internal systems, and grid integration equipment, such as demand-responsive controls to buoy grid stability.^{51,52}

California Building Energy Efficiency Standards (Title 24, Part 11)

The 2019 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, went into effect on January 1, 2020. The 2019 CALGreen Code includes mandatory measures for non-residential development related to site development; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality.

As previously discussed in Section 4 of this report, the Department of Housing and Community Development (HCD) updated CALGreen through the 2019 Triennial Code Adoption Cycle. HCD modified the best management practices for stormwater pollution prevention adding Section 5.106.2 for projects that disturb one or more acres of land. This section requires projects that disturb one acre or more of land or less than one acre of land but are part of a larger common plan of development or sale must comply with the postconstruction requirement detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board. The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff pre-project hydrology) with installation of postconstruction stormwater management measures.

⁵⁰ California Energy Commission (CEC). 2022. Building Energy Efficiency Standards. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency>.

⁵¹ <https://www.lightnowblog.com/2021/08/california-energy-commission-adopts-2022-building-energy-efficiency-standards/>

⁵² State of California Energy Commission. 2022 Building Energy Efficiency Standards Summary. https://www.energy.ca.gov/sites/default/files/2021-08/CEC_2022_EnergyCodeUpdateSummary_ADA.pdf

HCD added sections 5.106.4.1.3 and 5.106.4.1.5 in regard to bicycle parking. Section 5.106.4.1.3 requires new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility. In addition, Section 5.106.4.1.5 states that acceptable bicycle parking facility for Sections 5.106.4.1.2 through 5.106.4.1.4 shall be convenient from the street and shall meeting one of the following: (1) covered, lockable enclosures with permanently anchored racks for bicycles; (2) lockable bicycle rooms with permanently anchored racks; or (3) lockable, permanently anchored bicycle lockers.

HCD amended section 5.106.5.3.5 allowing future charging spaces to qualify as designated parking for clean air vehicles.

HCD updated section 5.303.3.3 in regard to showerhead flow rates. This update reduced the flow rate to 1.8 GPM.

HCD amended section 5.304.1 for outdoor potable water use in landscape areas and repealed sections 5.304.2 and 5.304.3. The update requires nonresidential developments to comply with a local water efficient landscape ordinance or the current California Department of Water Resource's' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. Some updates were also made in regard to the outdoor potable water use in landscape areas for public schools and community colleges.

HCD updated Section 5.504.5.3 in regard to the use of MERV filters in mechanically ventilated buildings. This update changed the filter use from MERV 8 to MERV 13. MERV 13 filters are to be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

The 2022 California Green Building Standards Code became effective on January 1, 2023⁵³ and builds upon the 2019 Standards.

In the 2022 Code, HCD amended Section 5.106.5.3 in regard to increasing the EV capable space percentages and adding a new requirement for installed Level 2 DCFC chargers. HCD under Section 5.106.5.4 added new regulation for electric vehicle charging readiness requirements for new construction of warehouse, grocery stores, and retail stores with planned off-street loading spaces.⁵⁴

Senate Bill 100

Senate Bill 100 (SB 100) requires 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. SB 100 was adopted September 2018.

The interim thresholds from prior Senate Bills and Executive Orders would also remain in effect. These include Senate Bill 1078 (SB 1078), which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 (SB 107) which changed the target date to 2010. Executive Order S-14-08, which was signed on November 2008 and expanded the State's Renewable Energy Standard to 33 percent renewable energy by 2020. Executive Order S-21-09 directed the CARB to adopt regulations by July 31, 2010 to enforce S-14-08. Senate Bill X1-2 codifies the 33 percent renewable energy requirement by 2020.

⁵³ California Building Standards Commission (CBSC). 2022. California Green Building Standards. Website: <https://codes.iccsafe.org/content/CAGBC2022P1>.

⁵⁴ <https://www.dgs.ca.gov/BSC/Resources/2022-Title-24-California-Code-Changes>

Senate Bill 350

As previously discussed in Section 4 of this report, Senate Bill 350 (SB 350) was signed into law October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard (RPS) eligible resources, including solar, wind, biomass, geothermal, and others. In addition, SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. To help ensure these goals are met and the greenhouse gas emission reductions are realized, large utilities will be required to develop and submit Integrated Resource Plans (IRPs). These IRPs will detail how each entity will meet their customers resource needs, reduce greenhouse gas emissions and ramp up the deployment of clean energy resources.

Assembly Bill 32

As discussed in Section 4 of this report, in 2006 the California State Legislature adopted Assembly Bill 32 (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 best management practices that are technologically feasible and cost effective. Please see Section 3 for further detail on AB 32.

Assembly Bill 1493/Pavley Regulations

As discussed in Section 4 of this report, California Assembly Bill 1493 enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. In 2005, the CARB submitted a "waiver" request to the EPA from a portion of the federal Clean Air Act in order to allow the State to set more stringent tailpipe emission standards for CO₂ and other GHG emissions from passenger vehicles and light duty trucks. On December 19, 2007 the EPA announced that it denied the "waiver" request. On January 21, 2009, CARB submitted a letter to the EPA administrator regarding the State's request to reconsider the waiver denial. The EPA approved the waiver on June 30, 2009. Although aimed at reducing GHG emissions, specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

Executive Order S-1-07/Low Carbon Fuel Standard

As discussed in Section 4 of this report, 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 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.

On April 23, 2009 CARB approved the proposed regulation to implement the low carbon fuel standard. The low carbon fuel standard is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. The low carbon fuel standard 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 each year beginning in 2011. Separate standards are established for gasoline and diesel fuels and the alternative fuels that can replace each. The standards are "back-loaded", with more reductions required in the last five years, than during the first five years. This schedule allows for the development of advanced fuels that are lower in carbon than today's fuels and the market penetration of plug-in hybrid electric vehicles, battery electric vehicles, fuel cell vehicles, and flexible fuel vehicles. It is anticipated that compliance with the low carbon fuel standard will be based on a combination of both lower carbon fuels and more efficient vehicles.

Reformulated gasoline mixed with corn-derived ethanol at ten percent by volume 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 as appropriate. 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 for the low carbon fuel standard.

California Air Resources Board

CARB's Advanced Clean Cars Program

Closely associated with the Pavley regulations, the Advanced Clean Cars emissions control program was approved by CARB in 2012. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles for model years 2015–2025.⁵⁵ The components of the Advanced Clean Cars program include the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years.⁵⁵

In addition, the Advanced Clean Cars II was effective as of November 30, 2022. This regulation takes the state's already growing zero-emission vehicle market and robust motor vehicle emission control rules and augments them to meet more aggressive tailpipe emissions standards and ramp up to 100 percent zero-emission vehicles. The Advanced Clean Cars II regulations will rapidly scale down light-duty passenger car, pickup truck and SUV emissions starting with the 2026 model year through 2035. The regulations are two-pronged. First, it amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards. These amendments support Governor Newsom's 2020 Executive Order [N-79-20](#) that requires all new passenger vehicles sold in California to be zero emissions by 2035. Second, the Low-emission Vehicle Regulations were amended to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions. In October 2023, CARB staff launched a new effort to consider potential amendments to the Advanced Clean Cars II regulations, including updates to the tailpipe greenhouse gas emission standard and limited revisions to the Low-emission Vehicle and Zero-emission Vehicle regulations.⁵⁶

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13, California Code of Regulations, Division 3, Chapter 10, Section 2435) was adopted to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. This section applies to diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by the vehicle.

Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen, and other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles

The Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles (Title 13, California Code of Regulations, Division 3, Chapter 1, Section 2025) was adopted to reduce emissions of diesel particulate matter, oxides of nitrogen

⁵⁵ California Air Resources Board, California's Advanced Clean Cars Program, January 18, 2017. www.arb.ca.gov/msprog/acc/acc.htm.

⁵⁶ California Air Resources Board, Advanced Clean Cars II. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>

(NOx) and other criteria pollutants from in-use diesel-fueled vehicles. This regulation is phased, with full implementation by 2023. The regulation aims to reduce emissions by requiring the installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. The newer emission-controlled models would use petroleum-based fuel in a more efficient manner.

Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or Senate Bill 375 (SB 375), coordinates land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction mandates established in AB 32.

As previously stated in Section 4 of this report, Senate Bill 375 (SB 375) was adopted September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's sustainable communities strategy or alternate planning strategy for consistency with its assigned targets.

The proposed project is located within the Southern California Association of Governments (SCAG) jurisdiction, which has authority to develop the SCS or APS. For the SCAG region, the targets set by CARB are at eight percent below 2005 per capita GHG emissions levels by 2020 and 19 percent below 2005 per capita GHG emissions levels by 2035. These reduction targets became effective October 2018.

PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

Evaluation Criteria

In compliance with Appendix G of the State CEQA Guidelines, this report analyzes the project's anticipated energy use to determine if the project would:

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

In addition, Appendix F of the State CEQA Guidelines states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

Methodology

Information from the CalEEMod 2022.1.1.29 Output contained in Appendix B, utilized for the air quality and greenhouse gas analyses in Sections 2 and 4 respectively of this report, were also utilized for this analysis. The CalEEMod outputs detail project related construction equipment, transportation energy demands, and facility energy demands.

Construction Energy Demands

The construction schedule is anticipated to start no sooner than October 2025 and being completed by approximately April 2027. Staging of construction vehicles and equipment will occur on-site. The approximately 18-month schedule is relatively short and the project site is approximately 13.59 acres.

Construction Equipment Electricity Usage Estimates

As stated previously, Electrical service will be provided by SCE. The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed project. Based on the 2021 National Construction Estimator, Richard Pray (2021),⁵⁷ the typical power cost per 1,000 square feet of building construction per month is estimated to be \$2.37. The project plans to develop the site with approximately 262,970 square feet of floor area consisting of 78,891 square feet of warehouse, 157,782 square feet of manufacturing, and 26,297 square feet of office. Based on Table 25, the total power cost of the on-site electricity usage during the construction of the proposed project is estimated to be approximately \$9,427.43. Furthermore, as shown in Table 25, the total electricity usage from project construction related activities is estimated to be approximately 67,339 kWh.⁵⁸

Construction Equipment Fuel Estimates

Fuel consumed by construction equipment would be the primary energy resource expended over the course of project construction. Fuel consumed by construction equipment was evaluated with the following assumptions:

- Construction schedule of approximately 18 months
- All construction equipment was assumed to run on diesel fuel
- Typical daily use of 8 hours, with some equipment operating from ~6-7 hours
- Aggregate fuel consumption rate for all equipment was estimated at 18.5 hp-hr/gallon (from CARB's 2017 Emissions Factors Tables and fuel consumption rate factors as shown in Table D-21 of the Moyer Guidelines: (https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf).
- Diesel fuel would be the responsibility of the equipment operators/contractors and would be sources within the region.
- Project construction represents a "single-event" for diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources during long term operation.

Using the CalEEMod data input for the air quality and greenhouse gas analyses (Sections 2 and 4 of this report), the project's construction phase would consume electricity and fossil fuels as a single energy demand, that is, once construction is completed their use would cease. CARB's 2017 Emissions Factors Tables show that on average aggregate fuel consumption (gasoline and diesel fuel) would be approximately 18.5 hp-hr-gal. Table 26 shows the results of the analysis of construction equipment.

As presented in Table 26, project construction activities would consume an estimated 53,294 gallons of diesel fuel. As stated previously, project construction would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

⁵⁷ Pray, Richard. 2021 National Construction Estimator. Carlsbad : Craftsman Book Company, 2021.

⁵⁸ Assumes the project will be under the General Service Non-Demand (GS-1) rate under SCE. <https://www.sce.com/regulatory/tariff-books/rates-pricing-choices>

Construction Worker Fuel Estimates

It is assumed that construction worker trips are from light duty autos (LDA), light duty truck 1 (LDT1), and light duty truck 2 (LDT2) at a mix of 25 percent/50 percent/25 percent, respectively, along area roadways.⁵⁹ With respect to estimated VMT, the construction worker trips would generate an estimated 687,881 VMT. Data regarding project related construction worker trips were based on CalEEMod 2022.1.1.29 model defaults.

Vehicle fuel efficiencies for construction workers were estimated in the air quality and greenhouse gas analyses (Sections 2 and 4 of this report) using information generated using CARB's EMFAC 2021 model. An aggregate fuel efficiency of 24.31 miles per gallon (mpg) was used to calculate vehicle miles traveled for construction worker trips. Table 27 shows that an estimated 28,302 gallons of fuel would be consumed for construction worker trips.

Construction Vendor/Hauling Fuel Estimates

Tables 28 and 29 show the estimated fuel consumption for vendor and hauling during construction. With respect to estimated VMT, the vendor and hauling trips would generate an estimated 243,341 VMT. Data regarding project related construction worker trips were based on CalEEMod 2022.1.1.29 model defaults.

For the architectural coatings it is assumed that the contractors would be responsible for bringing coatings and equipment with them in their light duty vehicles. Therefore, vendors delivering construction material or hauling debris from the site during demolition and grading would use medium to heavy duty vehicles with an average fuel consumption of 6.9 mpg for medium heavy duty trucks and 6.2 mpg for heavy heavy duty trucks (see Appendix B for details).⁶⁰ Tables 28 and 29 show that an estimated 36,939 gallons of fuel would be consumed for vendor and hauling trips.

Construction Energy Efficiency/Conservation Measures

Construction equipment used over the approximately fourteen-month construction phase would conform to CARB regulations and California emissions standards and is evidence of related fuel efficiencies. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

The project would utilize construction contractors which practice compliance with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with these measures would result in a more efficient use of construction-related energy and would minimize or eliminate wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additionally, as required by California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby minimizing or eliminating unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment.

⁵⁹ CalEEMod User's Guide Appendix C (April 2022) states that construction work trips are made by a fleet consisting of 25 percent light-duty auto (or passenger car), 50 percent light-duty truck type 1 (LDT1), and 25 percent light duty truck type 2 (LDT2).

⁶⁰ CalEEMod User's Guide Appendix C (April 2022) states that vendor trips are made by a fleet consisting of 50 percent medium trucks (MHDT) and 50 percent heavy trucks (HHDT) and that hauling and onsite truck trips are made by a fleet consisting of 100 percent HHDT.

Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Operational Energy Demands

Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

Transportation Fuel Consumption

Using the CalEEMod output from the air quality and greenhouse gas analyses (Sections 2 and 4 of this report), it is assumed that an average trip for autos and light trucks was assumed to be 13.9 miles and 3- 4-axle trucks were assumed to travel an average of 40 miles⁶¹. To present a worst-case scenario, it was assumed that vehicles would operate 365 days per year. Table 30 shows the estimated annual fuel consumption for all classes of vehicles from autos to heavy-heavy trucks.⁶²

Using the trip generation and truck split data from the TIA, the project is expected to generate approximately 1,169 (non-PCE) vehicle trips per day from the warehouse, office and manufacturing uses. The vehicle fleet mix was used from the CalEEMod output. Table 30 shows that an estimated 624,684 gallons of fuel would be consumed per year for the operation of the proposed project.

Trip generation and VMT generated by the proposed project are consistent with other similar industrial uses of similar scale and configuration as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021). That is, the proposed project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption. Furthermore, the state of California consumed approximately 3.5 billion gallons of diesel and 13.6 billion gallons of gasoline in 2023.^{63,64} Therefore, the increase in fuel consumption from the proposed project is insignificant in comparison to the State's demand. Therefore, project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

Facility Energy Demands (Electricity and Natural Gas)

Building operation and site maintenance (including landscape maintenance) would result in the consumption of electricity (provided by Southern California Edison) and natural gas (provided by Southern California Gas Company). The annual natural gas and electricity demands were provided per the CalEEMod output from the air quality and greenhouse gas analyses (Sections 2 and 4 of this report) and are provided in Table 31.

As shown in Table 31, the estimated electricity demand for the proposed project is approximately 2,661,344 kWh per year. In 2022, the non-residential sector of the County of Los Angeles consumed approximately 45,229 million kWh of electricity.⁶⁵ In addition, the estimated natural gas consumption for the proposed project is approximately 8,940,626 kBtu per year. In 2022, the non-residential sector of the County of Los Angeles consumed approximately 1,698 million therms of gas.⁶⁶ Therefore, the increase in both electricity and

⁶¹ CalEEMod default distance for H-W (home-work) or C-W (commercial-work) is 13.9 miles and 6.9 miles for H-O (home-other) or C-O (commercial-other). W-O (work-other) was changed to 40 miles for the warehouse land use per SCAQMD recommendations.

⁶² Average fuel economy based on aggregate mileage calculated in EMFAC 2021 for opening year (2024). See Appendix B for EMFAC output.

⁶³ <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics>

⁶⁴ <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics> and <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm>

⁶⁵ California Energy Commission, Electricity Consumption by County. <https://ecdm.energy.ca.gov/elecbycounty.aspx>

⁶⁶ California Energy Commission, Gas Consumption by County. <http://ecdm.energy.ca.gov/gasbycounty.aspx>

natural gas demand from the proposed project is insignificant compared to the County's 2022 non-residential sector demand.

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.).

Furthermore, the proposed project energy demands in total would be comparable to other non-residential projects of similar scale and configuration. Therefore, the project facilities' energy demands and energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

RENEWABLE ENERGY AND ENERGY EFFICIENCY PLAN CONSISTENCY

Regarding federal transportation regulations, the project site is located in an already developed area. Access to/from the project site is from existing roads. These roads are already in place so the project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be proposed pursuant to the ISTEA because SCAG is not planning for intermodal facilities in the project area.

Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by Southern California Edison and Southern California Gas Company.

Regarding Pavley (AB 1493) regulations, an individual project does not have the ability to comply or conflict with these regulations because they are intended for agencies and their adoption of procedures and protocols for reporting and certifying GHG emission reductions from mobile sources.

Regarding the State's Renewable Energy Portfolio Standards, the project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CALGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

As shown in Section 3 above, the proposed project is consistent with the applicable strategies of the City of Torrance Climate Action Plan.

CONCLUSIONS

As supported by the preceding analyses, project construction and operations would not result in the inefficient, wasteful or unnecessary consumption of energy. The proposed project does not include any unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities and is an industrial project that is not proposing any additional features that would require a larger energy demand than other industrial projects of similar scale and configuration. The energy demands of the project are anticipated to be accommodated within the context of available resources and energy delivery systems. The project would therefore not cause or result in the need for additional energy producing or transmission facilities. The project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservation goals within the State of California. Notwithstanding, the project proposes industrial warehouse uses and will not have any long-term effects on an energy provider's future energy development or future energy conservation strategies.

Table 23
Total Electricity System Power (California 2023)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Total California Energy Mix (GWh)	Total California Power Mix
Coal	257	0.12%	163	4,561	4,724	4,981	1.77%
Natural Gas	94,192	43.68%	52	8,530	8,582	102,774	36.56%
Oil	36	0.02%	-	-	-	36	0.01%
Other (Waste Heat/Petroleum Coke)	206	0.10%	-	-	-	206	0.07%
Unspecified Sources of Power	0	0.00%	100	10,273	10,373	10,373	3.69%
Total Thermal and Unspecified	94,690	43.91%	316	23,363	23,679	118,370	42.10%
Nuclear	17,714	8.22%	196	8361	8558	26,272	9.34%
Large Hydro	27,066	12.55%	4,712	1,109	5,821	32,886	11.70%
Biomass	5,037	2.34%	753	-	753	5,790	2.06%
Geothermal	10,999	5.10%	221	2,347	2,569	13,567	4.83%
Small Hydro	4,853	2.25%	133	2	135	4,988	1.77%
Solar	41,344	19.17%	417	6,108	6,525	47,869	17.03%
Wind	13,920	6.46%	9,177	8,302	17,479	31,399	11.17%
Total Non-GHG and Renewables	120,932	56.09%	15,609	26,229	41,838	162,771	57.90%
Total Energy	215,623	100%	15,925	49,593	65,518	281,140	100%

Notes:

- (1) Source: California Energy Commission. 2020 Total System electric Generation. <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation>

Table 24
SCE 2023 Power Content Mix

Energy Resources	2023 SCE Power Mix
Eligible Renewable	37.6%
<i>Biomass & Biowaste</i>	0.1%
<i>Geothermal</i>	5.2%
<i>Eligible Hydroelectric</i>	0.7%
<i>Solar</i>	19.8%
<i>Wind</i>	11.7%
Coal	0.0%
Large Hydroelectric	4.5%
Natural Gas	20.0%
Nuclear	9.1%
Other	0.1%
Unspecified Sources of power*	28.8%
Total	100%

Notes:

(1) <https://www.energy.ca.gov/filebrowser/download/7362>

* Unspecified sources of power means electricity from transactions that are not traceable to specific generation sources.

Table 25
Project Construction Power Cost and Electricity Usage

Power Cost (per 1,000 square foot of building per month of construction)	Total Building Size (1,000 Square Foot) ¹	Construction Duration (months)	Total Project Construction Power Cost
\$2.37	262.97	18	\$11,218.30

Cost per kWh ²	Total Project Construction Electricity Usage (kWh)
\$0.14	80,131

Notes:

*Assumes the project will be under the GS-1 General Service rate under SCE. Effective date of March 1, 2025. <https://www.sce.com/regulatory/tariff-books/rates-pricing-choices>

Table 26
Construction Equipment Fuel Consumption Estimates

Phase	Number of Days	Offroad Equipment Type	Amount	Usage Hours	Horse Power (HP)	Load Factor	HP hrs/day	Total Fuel Consumption (gal diesel fuel) ¹
Demolition	40	Concrete/Industrial Saws	1	8	33	0.73	193	417
	40	Excavators	3	8	36	0.38	328	710
	40	Rubber Tired Dozers	2	8	367	0.40	2,349	5,078
Grading	30	Excavators	2	8	36	0.38	219	355
	30	Graders	1	8	148	0.41	485	787
	30	Rubber Tired Dozers	1	8	367	0.40	1,174	1,904
	30	Scrapers	2	8	423	0.48	3,249	5,268
	30	Tractors/Loaders/Backhoes	2	8	84	0.37	497	806
	30	Tractors/Loaders/Backhoes	2	8	84	0.37	497	806
Building Construction	321	Cranes	1	7	367	0.29	745	12,927
	321	Forklifts	3	8	82	0.20	394	6,829
	321	Generator Sets	1	8	14	0.74	83	1,438
	321	Tractors/Loaders/Backhoes	3	7	84	0.37	653	11,325
	321	Welders	1	8	46	0.45	166	2,873
Paving	34	Pavers	2	8	81	0.42	544	1,000
	34	Paving Equipment	2	8	89	0.36	513	942
	34	Rollers	2	8	36	0.38	219	402
Architectural Coating	40	Air Compressors	1	6	37	0.48	107	230
CONSTRUCTION FUEL DEMAND (gallons of diesel fuel)								53,294

Notes:

- (1) Using Carl Moyer Guidelines Table D-21 Fuel consumption rate factors (bhp-hr/gal) for engines less than 750 hp.
(Source: https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf)

Table 27
Construction Worker Fuel Consumption Estimates

Phase	Number of Days	Worker Trips/Day	Trip Length (miles) ¹	Vehicle Miles Traveled ¹	Average Vehicle Fuel Economy (mpg) ²	Estimated Fuel Consumption (gallons)
Demolition	40	15	18.5	11,100	24.31	457
Grading	30	20	18.5	11,100	24.31	457
Building Construction	321	107.82	18.5	640,289	24.31	26,344
Paving	34	15	18.5	9,435	24.31	388
Architectural Coating	40	21.564	18.5	15,957	24.31	657
Total Construction Worker Fuel Consumption						28,302

Notes:

- (1) Assumptions for the worker trip length and vehicle miles traveled are consistent with CalEEMod Version 2022.1.1.29 defaults.
- (2) Per CalEEMod User's Guide Appendix C (April 2022), CalEEMod assumes that construction work trips are made by a fleet consisting of 25 percent light-duty auto (or passenger car), 50 percent light-duty truck type 1 (LDT1), and 25 percent light duty truck type 2 (LDT2).

Table 28
Construction Vendor Fuel Consumption Estimates (MHD & HHD Trucks)

Phase	Number of Days	Vendor Trips/Day	Trip Length (miles) ¹	Vehicle Miles Traveled ¹	Average Vehicle Fuel Economy (mpg) ²	Estimated Fuel Consumption (gallons)
Demolition	40	0	10.2	0	6.9	0
Grading	30	0	10.2	0	6.9	0
Building Construction	321	43.101	10.2	141,121	6.9	20,452
Paving	34	0	10.2	0	6.9	0
Architectural Coating	40	0	10.2	0	6.9	0
Total Construction Vendor Fuel Consumption						20,452

Notes:

- (1) Assumptions for the vendor trip length and vehicle miles traveled are consistent with CalEEMod Version 2022.1.1.29 defaults.
- (2) Per CalEEMod User's Guide Appendix C (April 2022), CalEEMod assumes vendor trips are made by a fleet consisting of 50 percent medium trucks (MHDT) and 50 percent heavy trucks (HHDT).

Table 29
Construction Hauling Fuel Consumption Estimates (HHD Trucks)

Phase	Number of Days	Hauling Trips/Day	Trip Length (miles) ¹	Vehicle Miles Traveled ¹	Average Vehicle Fuel Economy (mpg) ²	Estimated Fuel Consumption (gallons)
Demolition	40	66.8	20	53,440	6.2	8,619
Grading	30	81	20	48,780	6.2	7,868
Building Construction	321	0	20	0	6.2	0
Paving	34	0	20	0	6.2	0
Architectural Coating	40	0	20	0	6.2	0
Total Construction Hauling Fuel Consumption						16,487

Notes:

- (1) Assumptions for the hauling trip length and vehicle miles traveled are consistent with CalEEMod Version 2022.1.1.29 defaults.
- (2) Per CalEEMod User's Guide Appendix C (April 2022), CalEEMod assumes hauling and onsite truck trips are made by a fleet consisting of 100 percent HHDT.

Table 30
Estimated Vehicle Operations Fuel Consumption

Vehicle Type	Vehicle Mix	Number of Vehicle Trips	Average Trip Length (miles) ¹	Daily VMT	Average Fuel Economy (mpg)	Total Gallons per Day	Total Annual Fuel Consumption (gallons)
Light Auto	Automobile	504	13.9	7,006	34.19	204.90	74,789
Light Truck	Automobile	44	13.9	612	23.14	26.43	9,647
Light Truck	Automobile	224	13.9	3,114	24.22	128.55	46,923
Medium Truck	Automobile	137	13.9	1,899	24.22	78.42	28,625
Light Heavy Truck	2-Axle Truck	32	40	1,299	16.1	80.67	29,445
Light Heavy Truck 10,000 lbs +	2-Axle Truck	8	40	319	17.02	18.73	6,837
Medium Heavy Truck	3-Axle Truck	54	40	2,170	7.83	277.09	101,137
Heavy Heavy Truck	4-Axle Truck	144	40	5,766	6.48	889.74	324,755
Motorcycle	Automobile	21	13.9	287	41.52	6.92	2,527
Total		1,169	--	22,470	--	1711.46	--
Total Annual Fuel Consumption							624,684

Notes:

(1) Based on the size of the site and relative location, trips were assumed to be local rather than regional.

Table 31
Project Annual Operational Energy Demand Summary

Natural Gas Demand	kBTU/year ¹
General Office Building	666,536
Manufacturing	6,753,376
Unrefrigerated Warehouse - No Rail	1,520,714
Total	8,940,626

Electricity Demand	kWh/year ¹
General Office Building	468,620
Manufacturing	1,513,561
Parking Lots	309,924
Unrefrigerated Warehouse - No Rail	369,239
Total	2,661,344

Notes:

(1) Taken from the CalEEMod Version 2022.1.1.29 output (Appendix B of this report).

6. EMISSIONS REDUCTION MEASURES

CONSTRUCTION MEASURES

Adherence to SCAQMD Rule 403 is required.

OPERATIONAL MEASURES

No measures beyond current regulatory standards are required.

7. REFERENCES

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California Air Resources Board

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2008 Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act

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2011 Supplement to the AB 32 Scoping Plan Functional Equivalent Document

2013 Almanac of Emissions and Air Quality.
Source: <https://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm>

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2025 Historical Air Quality, Top 4 Summary

City of Torrance

2010 City of Torrance General Plan. April 6.

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2018 CEQA Guideline Sections to be Added or Amended

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Linscott Law & Greenspan Engineers

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Office of Environmental Health Hazard Assessment

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South Coast Air Quality Management District

1993 CEQA Air Quality Handbook

2003 Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis

2005 Rule 403 Fugitive Dust

2007 2007 Air Quality Management Plan

2008 Final Localized Significance Threshold Methodology, Revised

2012 Final 2012 Air Quality Management Plan

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2020 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

U.S. Environmental Protection Agency (EPA)

2017 Understanding Global Warming Potentials
(Source: <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>)

U.S. Geological Survey

2011 Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California

APPENDICES

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APPENDIX A

GLOSSARY

AQMP	Air Quality Management Plan
BACT	Best Available Control Technologies
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CEQA	California Environmental Quality Act
CFCs	Chlorofluorocarbons
CH ₄	Methane
CNG	Compressed natural gas
CO	Carbon monoxide
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DPM	Diesel particulate matter
EPA	U.S. Environmental Protection Agency
GHG	Greenhouse gas
GWP	Global warming potential
HIDPM	Hazard Index Diesel Particulate Matter
HFCs	Hydrofluorocarbons
IPCC	International Panel on Climate Change
LCFS	Low Carbon Fuel Standard
LST	Localized Significant Thresholds
MTCO ₂ e	Metric tons of carbon dioxide equivalent
MMTCO ₂ e	Million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NO _x	Nitrogen Oxides
NO ₂	Nitrogen dioxide
N ₂ O	Nitrous oxide
O ₃	Ozone
OPR	Governor's Office of Planning and Research
PFCs	Perfluorocarbons
PM	Particle matter
PM ₁₀	Particles that are less than 10 micrometers in diameter
PM _{2.5}	Particles that are less than 2.5 micrometers in diameter
PMI	Point of maximum impact
PPM	Parts per million
PPB	Parts per billion
RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
SANBAG	San Bernardino Association of Governments
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SSAB	Salton Sea Air Basin
SF ₆	Sulfur hexafluoride
SIP	State Implementation Plan
SO _x	Sulfur Oxides
TAC	Toxic air contaminants
VOC	Volatile organic compounds

APPENDIX B

**CALEEMOD MODEL DETAILED REPORT, LST CALCULATIONS,
AND EMFAC DATA**

190th St Warehouse v3 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	190th St Warehouse v3
Construction Start Date	10/1/2025
Operational Year	2027
Lead Agency	City of Torrance
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.4
Location	2555 W 190th St, Torrance, CA 90504, USA
County	Los Angeles-South Coast
City	Torrance
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4672
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

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	78.9	1000sqft	1.81	78,891	7,401	—	—	—

Manufacturing	158	1000sqft	3.62	157,782	7,401	—	—	—
General Office Building	26.3	1000sqft	0.60	26,297	7,401	—	—	office within warehouse bldg
Parking Lot	552	Space	7.55	0.00	7,401	—	—	Parking lot and onsite roadway
Parking Lot	18.0	Space	0.57	0.00	0.00	—	—	Parking along Crenshaw Place

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	33.1	11.8	20.6	0.03	0.40	1.78	2.18	0.36	0.43	0.79	—	5,202	5,202	0.21	0.26	8.57	5,294
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	36.0	37.0	32.2	0.10	1.31	5.25	6.23	1.21	1.43	2.63	—	12,495	12,495	0.59	0.95	0.37	12,793
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.02	8.78	14.4	0.02	0.29	1.28	1.58	0.26	0.32	0.58	—	3,761	3,761	0.16	0.20	2.67	3,826
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.73	1.60	2.62	< 0.005	0.05	0.23	0.29	0.05	0.06	0.11	—	623	623	0.03	0.03	0.44	633

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.51	11.8	20.6	0.03	0.40	1.78	2.18	0.36	0.43	0.79	—	5,202	5,202	0.21	0.26	8.57	5,294
2027	33.1	0.91	2.42	< 0.005	0.02	0.28	0.30	0.02	0.07	0.08	—	420	420	0.02	0.01	0.89	425
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.36	37.0	32.2	0.10	1.31	5.25	6.23	1.21	1.43	2.63	—	12,495	12,495	0.59	0.95	0.37	12,793
2026	3.20	34.2	31.3	0.10	1.19	4.18	5.37	1.10	1.43	2.53	—	12,388	12,388	0.59	0.95	0.35	12,685
2027	36.0	19.3	32.1	0.05	0.66	2.26	2.92	0.61	0.54	1.16	—	7,179	7,179	0.25	0.28	0.24	7,270
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.51	5.70	4.80	0.01	0.20	0.87	1.07	0.18	0.21	0.39	—	1,785	1,785	0.09	0.15	0.97	1,833
2026	1.09	8.78	14.4	0.02	0.29	1.28	1.58	0.26	0.32	0.58	—	3,761	3,761	0.16	0.20	2.67	3,826
2027	4.02	2.75	4.67	0.01	0.09	0.36	0.45	0.08	0.09	0.17	—	1,101	1,101	0.04	0.05	0.67	1,116
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.09	1.04	0.88	< 0.005	0.04	0.16	0.19	0.03	0.04	0.07	—	296	296	0.01	0.02	0.16	303
2026	0.20	1.60	2.62	< 0.005	0.05	0.23	0.29	0.05	0.06	0.11	—	623	623	0.03	0.03	0.44	633
2027	0.73	0.50	0.85	< 0.005	0.02	0.07	0.08	0.02	0.02	0.03	—	182	182	0.01	0.01	0.11	185

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	9.98	6.78	25.0	0.04	0.39	2.02	2.41	0.38	0.51	0.89	272	8,939	9,211	28.2	0.41	47.9	10,088
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.09	6.76	12.8	0.04	0.37	2.02	2.39	0.37	0.51	0.88	272	8,801	9,073	28.2	0.42	41.3	9,944
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.31	4.10	16.7	0.03	0.25	1.51	1.76	0.24	0.38	0.63	272	7,793	8,066	28.2	0.39	43.4	8,930
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.52	0.75	3.04	0.01	0.05	0.28	0.32	0.04	0.07	0.11	45.1	1,290	1,335	4.66	0.06	7.18	1,478

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.94	0.78	8.64	0.02	0.01	2.02	2.04	0.01	0.51	0.53	—	2,230	2,230	0.10	0.09	6.81	2,266
Area	7.89	0.10	11.4	< 0.005	0.02	—	0.02	0.02	—	0.02	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Energy	0.13	2.40	2.02	0.01	0.18	—	0.18	0.18	—	0.18	—	5,517	5,517	0.51	0.04	—	5,540
Water	—	—	—	—	—	—	—	—	—	—	114	386	499	11.7	0.28	—	876
Waste	—	—	—	—	—	—	—	—	—	—	159	0.00	159	15.9	0.00	—	555
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.1	41.1
Off-Road	0.14	1.08	0.70	< 0.005	0.05	—	0.05	0.04	—	0.04	—	317	317	0.01	< 0.005	—	318
Stationary	0.87	2.42	2.21	< 0.005	0.13	0.00	0.13	0.13	0.00	0.13	0.00	443	443	0.02	< 0.005	0.00	444
Total	9.98	6.78	25.0	0.04	0.39	2.02	2.41	0.38	0.51	0.89	272	8,939	9,211	28.2	0.41	47.9	10,088
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.93	0.85	7.91	0.02	0.01	2.02	2.04	0.01	0.51	0.53	—	2,139	2,139	0.10	0.09	0.18	2,170
Area	6.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.13	2.40	2.02	0.01	0.18	—	0.18	0.18	—	0.18	—	5,517	5,517	0.51	0.04	—	5,540
Water	—	—	—	—	—	—	—	—	—	—	114	386	499	11.7	0.28	—	876
Waste	—	—	—	—	—	—	—	—	—	—	159	0.00	159	15.9	0.00	—	555
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.1	41.1
Off-Road	0.14	1.08	0.70	< 0.005	0.05	—	0.05	0.04	—	0.04	—	317	317	0.01	< 0.005	—	318
Stationary	0.87	2.42	2.21	< 0.005	0.13	0.00	0.13	0.13	0.00	0.13	0.00	443	443	0.02	< 0.005	0.00	444
Total	8.09	6.76	12.8	0.04	0.37	2.02	2.39	0.37	0.51	0.88	272	8,801	9,073	28.2	0.42	41.3	9,944
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.70	0.65	6.12	0.02	0.01	1.51	1.52	0.01	0.38	0.39	—	1,631	1,631	0.08	0.07	2.22	1,656
Area	7.30	0.07	7.83	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.2	32.2	< 0.005	< 0.005	—	32.3
Energy	0.13	2.40	2.02	0.01	0.18	—	0.18	0.18	—	0.18	—	5,480	5,480	0.50	0.04	—	5,503
Water	—	—	—	—	—	—	—	—	—	—	114	386	499	11.7	0.28	—	876
Waste	—	—	—	—	—	—	—	—	—	—	159	0.00	159	15.9	0.00	—	555
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.1	41.1
Off-Road	0.10	0.77	0.50	< 0.005	0.03	—	0.03	0.03	—	0.03	—	226	226	0.01	< 0.005	—	226
Stationary	0.08	0.21	0.19	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	39.1	39.1	< 0.005	< 0.005	0.00	39.2
Total	8.31	4.10	16.7	0.03	0.25	1.51	1.76	0.24	0.38	0.63	272	7,793	8,066	28.2	0.39	43.4	8,930
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.13	0.12	1.12	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	—	270	270	0.01	0.01	0.37	274
Area	1.33	0.01	1.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.33	5.33	< 0.005	< 0.005	—	5.35
Energy	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	907	907	0.08	0.01	—	911
Water	—	—	—	—	—	—	—	—	—	—	18.8	63.8	82.7	1.94	0.05	—	145
Waste	—	—	—	—	—	—	—	—	—	—	26.3	0.00	26.3	2.62	0.00	—	91.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.81	6.81

Off-Road	0.02	0.14	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	37.3	37.3	< 0.005	< 0.005	—	37.5
Stationary	0.01	0.04	0.04	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.47	6.47	< 0.005	< 0.005	0.00	6.50
Total	1.52	0.75	3.04	0.01	0.05	0.28	0.32	0.04	0.07	0.11	45.1	1,290	1,335	4.66	0.06	7.18	1,478

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	3.81	3.81	—	0.58	0.58	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	2.43	2.18	< 0.005	0.10	—	0.10	0.09	—	0.09	—	375	375	0.02	< 0.005	—	377
Demolition	—	—	—	—	—	0.42	0.42	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.44	0.40	< 0.005	0.02	—	0.02	0.02	—	0.02	—	62.1	62.1	< 0.005	< 0.005	—	62.4
Demolition	—	—	—	—	—	0.08	0.08	—	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	197	197	0.01	0.01	0.02	199
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	0.00
Hauling	0.07	5.90	2.23	0.03	0.06	1.24	1.30	0.06	0.34	0.40	—	4,630	4,630	0.25	0.73	0.28	4,852
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.9	21.9	< 0.005	< 0.005	0.04	22.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.65	0.24	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	507	507	0.03	0.08	0.51	532
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.62	3.62	< 0.005	< 0.005	0.01	3.67
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	0.00
Hauling	< 0.005	0.12	0.04	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	84.0	84.0	< 0.005	0.01	0.08	88.1

3.3. Grading (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	2.41	2.41	—	0.95	0.95	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	2.09	1.99	< 0.005	0.09	—	0.09	0.08	—	0.08	—	465	465	0.02	< 0.005	—	466
Dust From Material Movement	—	—	—	—	—	0.17	0.17	—	0.07	0.07	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.38	0.36	< 0.005	0.02	—	0.02	0.01	—	0.01	—	77.0	77.0	< 0.005	< 0.005	—	77.2
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.18	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	262	262	0.01	0.01	0.03	265
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	0.00
Hauling	0.08	7.18	2.72	0.04	0.07	1.51	1.58	0.07	0.41	0.48	—	5,634	5,634	0.31	0.88	0.34	5,906
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.03	19.0
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	0.00
Hauling	0.01	0.51	0.19	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	—	397	397	0.02	0.06	0.40	416
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.10	3.10	< 0.005	< 0.005	0.01	3.14
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	0.00
Hauling	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	65.7	65.7	< 0.005	0.01	0.07	68.9

3.5. Grading (2026) - 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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	2.41	2.41	—	0.95	0.95	—	—	—	—	—	—	—

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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.32	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.5	77.5	< 0.005	< 0.005	—	77.7
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	1.10	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	257	257	0.01	0.01	0.02	260
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	0.00
Hauling	0.08	6.92	2.65	0.04	0.07	1.51	1.58	0.07	0.41	0.48	—	5,532	5,532	0.31	0.88	0.32	5,804
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.06	3.06	< 0.005	< 0.005	< 0.005	3.10
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	0.00

Hauling	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.9	64.9	< 0.005	0.01	0.06	68.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.01	11.3

3.7. Building Construction (2026) - 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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	6.92	9.11	0.02	0.27	—	0.27	0.24	—	0.24	—	1,684	1,684	0.07	0.01	—	1,690
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.14	1.26	1.66	< 0.005	0.05	—	0.05	0.04	—	0.04	—	279	279	0.01	< 0.005	—	280
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.42	6.96	0.00	0.00	1.41	1.41	0.00	0.33	0.33	—	1,461	1,461	0.06	0.05	4.94	1,482
Vendor	0.04	1.48	0.72	0.01	0.02	0.37	0.39	0.01	0.10	0.11	—	1,344	1,344	0.06	0.19	3.63	1,406
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.47	5.94	0.00	0.00	1.41	1.41	0.00	0.33	0.33	—	1,385	1,385	0.06	0.05	0.13	1,402
Vendor	0.04	1.55	0.73	0.01	0.02	0.37	0.39	0.01	0.10	0.11	—	1,344	1,344	0.06	0.19	0.09	1,403
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.36	4.37	0.00	0.00	0.98	0.98	0.00	0.23	0.23	—	987	987	0.04	0.04	1.50	1,001
Vendor	0.03	1.09	0.51	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	944	944	0.04	0.13	1.10	986
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.07	0.80	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	163	163	0.01	0.01	0.25	166
Vendor	0.01	0.20	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	156	156	0.01	0.02	0.18	163
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	0.00

3.9. Building Construction (2027) - 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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.65	2.28	< 0.005	0.06	—	0.06	0.05	—	0.05	—	422	422	0.02	< 0.005	—	424
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.30	0.42	< 0.005	0.01	—	0.01	0.01	—	0.01	—	69.9	69.9	< 0.005	< 0.005	—	70.1
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.46	5.49	0.00	0.00	1.41	1.41	0.00	0.33	0.33	—	1,358	1,358	0.02	0.05	0.12	1,374
Vendor	0.04	1.48	0.69	0.01	0.01	0.37	0.38	0.01	0.10	0.11	—	1,318	1,318	0.06	0.18	0.09	1,374
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	1.02	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	243	243	< 0.005	0.01	0.34	246

Vendor	0.01	0.26	0.12	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	232	232	0.01	0.03	0.26	242
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.2	40.2	< 0.005	< 0.005	0.06	40.7
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.4	38.4	< 0.005	0.01	0.04	40.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2027) - 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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.65	0.93	< 0.005	0.03	—	0.03	0.03	—	0.03	—	141	141	0.01	< 0.005	—	141
Paving	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.17	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.3	23.3	< 0.005	< 0.005	—	23.4

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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	189	189	< 0.005	0.01	0.02	191
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.9	17.9	< 0.005	< 0.005	0.02	18.1
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.96	2.96	< 0.005	< 0.005	< 0.005	3.00
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	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	0.00

3.13. Architectural Coating (2027) - 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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	32.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	32.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.6	14.6	< 0.005	< 0.005	—	14.7
Architectural Coatings	3.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.42	2.42	< 0.005	< 0.005	—	2.43
Architectural Coatings	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.30	0.00	0.00	0.28	0.28	0.00	0.07	0.07	—	287	287	0.01	0.01	0.89	291
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	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.10	0.00	0.00	0.28	0.28	0.00	0.07	0.07	—	272	272	< 0.005	0.01	0.02	275
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	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.2	30.2	< 0.005	< 0.005	0.04	30.6
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	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.00	5.00	< 0.005	< 0.005	0.01	5.07
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	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	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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.02	0.06	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	24.9	24.9	< 0.005	< 0.005	0.07	25.6
Manufacturing	0.02	0.06	0.20	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	82.0	82.0	< 0.005	0.01	0.23	84.4
General Office Building	0.92	0.71	8.38	0.02	0.01	1.95	1.97	0.01	0.50	0.51	—	2,123	2,123	0.10	0.08	6.52	2,156
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	0.00	0.00	0.00	0.00
Total	0.94	0.78	8.64	0.02	0.01	2.02	2.04	0.01	0.51	0.53	—	2,230	2,230	0.10	0.09	6.81	2,266
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.02	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	24.3	24.3	< 0.005	< 0.005	< 0.005	24.9
Manufacturing	0.02	0.06	0.19	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	80.0	80.0	< 0.005	0.01	0.01	82.3
General Office Building	0.91	0.77	7.67	0.02	0.01	1.95	1.97	0.01	0.50	0.51	—	2,035	2,035	0.10	0.08	0.17	2,063
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	0.00	0.00	0.00	0.00
Total	0.93	0.85	7.91	0.02	0.01	2.02	2.04	0.01	0.51	0.53	—	2,139	2,139	0.10	0.09	0.18	2,170
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.95	2.95	< 0.005	< 0.005	< 0.005	3.03
Manufacturing	< 0.005	0.01	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.01	10.8
General Office Building	0.12	0.11	1.08	< 0.005	< 0.005	0.27	0.27	< 0.005	0.07	0.07	—	257	257	0.01	0.01	0.35	260
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	0.00	0.00	0.00	0.00
Total	0.13	0.12	1.12	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	—	270	270	0.01	0.01	0.37	274

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	350	350	0.03	< 0.005	—	352
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	1,436	1,436	0.14	0.02	—	1,444
General Office Building	—	—	—	—	—	—	—	—	—	—	—	444	444	0.04	0.01	—	447
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	294	294	0.03	< 0.005	—	296

undefined	—	—	—	—	—	—	—	—	—	—	—	127	127	0.01	< 0.005	—	128
Total	—	—	—	—	—	—	—	—	—	—	—	2,651	2,651	0.25	0.03	—	2,667
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	350	350	0.03	< 0.005	—	352
Manufact uring	—	—	—	—	—	—	—	—	—	—	—	1,436	1,436	0.14	0.02	—	1,444
General Office Building	—	—	—	—	—	—	—	—	—	—	—	444	444	0.04	0.01	—	447
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	294	294	0.03	< 0.005	—	296
undefined	—	—	—	—	—	—	—	—	—	—	—	127	127	0.01	< 0.005	—	128
Total	—	—	—	—	—	—	—	—	—	—	—	2,651	2,651	0.25	0.03	—	2,667
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	—	58.0	58.0	0.01	< 0.005	—	58.3
Manufact uring	—	—	—	—	—	—	—	—	—	—	—	238	238	0.02	< 0.005	—	239
General Office Building	—	—	—	—	—	—	—	—	—	—	—	73.6	73.6	0.01	< 0.005	—	74.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	48.7	48.7	< 0.005	< 0.005	—	49.0
undefined	—	—	—	—	—	—	—	—	—	—	—	15.0	15.0	< 0.005	< 0.005	—	15.1
Total	—	—	—	—	—	—	—	—	—	—	—	433	433	0.04	0.01	—	435

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.02	0.41	0.34	< 0.005	0.03	—	0.03	0.03	—	0.03	—	487	487	0.04	< 0.005	—	489
Manufacturing	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,164	2,164	0.19	< 0.005	—	2,170
General Office Building	0.01	0.18	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	214	214	0.02	< 0.005	—	214
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	—	0.00
Total	0.13	2.40	2.02	0.01	0.18	—	0.18	0.18	—	0.18	—	2,865	2,865	0.25	0.01	—	2,873
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.02	0.41	0.34	< 0.005	0.03	—	0.03	0.03	—	0.03	—	487	487	0.04	< 0.005	—	489
Manufacturing	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,164	2,164	0.19	< 0.005	—	2,170
General Office Building	0.01	0.18	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	214	214	0.02	< 0.005	—	214
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	—	0.00
Total	0.13	2.40	2.02	0.01	0.18	—	0.18	0.18	—	0.18	—	2,865	2,865	0.25	0.01	—	2,873

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	80.7	80.7	0.01	< 0.005	—	80.9
Manufacturing	0.02	0.33	0.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	358	358	0.03	< 0.005	—	359
General Office Building	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	35.4	35.4	< 0.005	< 0.005	—	35.5
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	—	0.00
Total	0.02	0.44	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	474	474	0.04	< 0.005	—	476

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.88	0.10	11.4	< 0.005	0.02	—	0.02	0.02	—	0.02	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Total	7.89	0.10	11.4	< 0.005	0.02	—	0.02	0.02	—	0.02	—	47.0	47.0	< 0.005	< 0.005	—	47.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	5.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.23	0.01	1.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.33	5.33	< 0.005	< 0.005	—	5.35
Total	1.33	0.01	1.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.33	5.33	< 0.005	< 0.005	—	5.35

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrige rated Warehou se-No	—	—	—	—	—	—	—	—	—	—	35.0	118	153	3.60	0.09	—	269
Manufact uring	—	—	—	—	—	—	—	—	—	—	69.9	236	306	7.19	0.17	—	537
General Office Building	—	—	—	—	—	—	—	—	—	—	8.96	30.7	39.7	0.92	0.02	—	69.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.52	0.52	< 0.005	< 0.005	—	0.53
Total	—	—	—	—	—	—	—	—	—	—	114	386	499	11.7	0.28	—	876
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	35.0	118	153	3.60	0.09	—	269
Manufact uring	—	—	—	—	—	—	—	—	—	—	69.9	236	306	7.19	0.17	—	537
General Office Building	—	—	—	—	—	—	—	—	—	—	8.96	30.7	39.7	0.92	0.02	—	69.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.52	0.52	< 0.005	< 0.005	—	0.53
Total	—	—	—	—	—	—	—	—	—	—	114	386	499	11.7	0.28	—	876
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	—	—	—	—	—	—	—	—	—	—	5.79	19.6	25.4	0.60	0.01	—	44.5
Manufact uring	—	—	—	—	—	—	—	—	—	—	11.6	39.1	50.7	1.19	0.03	—	89.0

General Office Building	—	—	—	—	—	—	—	—	—	—	1.48	5.08	6.57	0.15	< 0.005	—	11.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.09	0.09	< 0.005	< 0.005	—	0.09
Total	—	—	—	—	—	—	—	—	—	—	18.8	63.8	82.7	1.94	0.05	—	145

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	40.0	0.00	40.0	3.99	0.00	—	140
Manufacturing	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	369
General Office Building	—	—	—	—	—	—	—	—	—	—	13.2	0.00	13.2	1.32	0.00	—	46.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	159	0.00	159	15.9	0.00	—	555
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No	—	—	—	—	—	—	—	—	—	—	40.0	0.00	40.0	3.99	0.00	—	140
Manufacturing	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	369
General Office Building	—	—	—	—	—	—	—	—	—	—	13.2	0.00	13.2	1.32	0.00	—	46.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	159	0.00	159	15.9	0.00	—	555
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	6.62	0.00	6.62	0.66	0.00	—	23.2
Manufacturing	—	—	—	—	—	—	—	—	—	—	17.5	0.00	17.5	1.74	0.00	—	61.1
General Office Building	—	—	—	—	—	—	—	—	—	—	2.18	0.00	2.18	0.22	0.00	—	7.63
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	26.3	0.00	26.3	2.62	0.00	—	91.9

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.1	41.1
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.1	41.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.1	41.1
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.1	41.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.80	6.80
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.81	6.81

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------------	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Material Handling Equipment	0.14	1.08	0.70	< 0.005	0.05	—	0.05	0.04	—	0.04	—	317	317	0.01	< 0.005	—	318
Forklifts	0.00	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	0.14	1.08	0.70	< 0.005	0.05	—	0.05	0.04	—	0.04	—	317	317	0.01	< 0.005	—	318
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Material Handling Equipment	0.14	1.08	0.70	< 0.005	0.05	—	0.05	0.04	—	0.04	—	317	317	0.01	< 0.005	—	318
Forklifts	0.00	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	0.14	1.08	0.70	< 0.005	0.05	—	0.05	0.04	—	0.04	—	317	317	0.01	< 0.005	—	318
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Material Handling Equipment	0.02	0.14	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	37.3	37.3	< 0.005	< 0.005	—	37.5
Forklifts	0.00	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	0.02	0.14	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	37.3	37.3	< 0.005	< 0.005	—	37.5

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	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------------	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.25	0.71	0.65	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	130	130	0.01	< 0.005	0.00	131
Emergency Generator	0.61	1.71	1.56	< 0.005	0.09	0.00	0.09	0.09	0.00	0.09	0.00	313	313	0.01	< 0.005	0.00	314
Total	0.87	2.42	2.21	< 0.005	0.13	0.00	0.13	0.13	0.00	0.13	0.00	443	443	0.02	< 0.005	0.00	444
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.25	0.71	0.65	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	130	130	0.01	< 0.005	0.00	131
Emergency Generator	0.61	1.71	1.56	< 0.005	0.09	0.00	0.09	0.09	0.00	0.09	0.00	313	313	0.01	< 0.005	0.00	314
Total	0.87	2.42	2.21	< 0.005	0.13	0.00	0.13	0.13	0.00	0.13	0.00	443	443	0.02	< 0.005	0.00	444
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	3.07	3.07	< 0.005	< 0.005	0.00	3.08
Emergency Generator	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	3.40	3.40	< 0.005	< 0.005	0.00	3.42
Total	0.01	0.04	0.04	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.47	6.47	< 0.005	< 0.005	0.00	6.50

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	BCO2	NBCO2	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	BCO2	NBCO2	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	BCO2	NBCO2	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	BCO2	NBCO2	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	10/1/2025	11/25/2025	5.00	40.0	—
Grading	Grading	11/26/2025	1/6/2026	5.00	30.0	—
Building Construction	Building Construction	1/7/2026	3/31/2027	5.00	321	—
Paving	Paving	1/13/2027	3/1/2027	5.00	34.0	—
Architectural Coating	Architectural Coating	2/8/2027	4/02/2027	5.00	40.0	—

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	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
------------	-----------	-----------------------	----------------	-------------

Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	66.8	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	81.3	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	108	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	43.1	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	21.6	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
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

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	394,455	131,485	21,228

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	10,687	—
Grading	19,506	—	90.0	0.00	—
Paving	0.00	0.00	0.00	0.00	8.12

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%

Manufacturing	0.00	0%
General Office Building	0.00	0%
Parking Lot	7.55	100%
Parking Lot	0.57	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	349	0.03	< 0.005
2026	0.00	346	0.03	< 0.005
2027	0.00	346	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	135	11.8	3.16	35,953	2,226	195	52.1	593,136
Manufacturing	749	235	156	215,800	7,241	2,271	1,509	2,084,840
General Office Building	285	58.1	18.4	78,309	2,754	561	178	756,546
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	394,455	131,485	21,228

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBtu/yr)
Unrefrigerated Warehouse-No Rail	369,239	346	0.0330	0.0040	1,520,714
Manufacturing	1,513,561	346	0.0330	0.0040	6,753,376
General Office Building	468,620	346	0.0330	0.0040	666,536
Parking Lot	288,212	346	0.0330	0.0040	0.00
Parking Lot	21,712	346	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	18,243,544	103,799
Manufacturing	36,487,088	103,799

General Office Building	4,673,864	103,799
Parking Lot	0.00	103,799
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	74.2	—
Manufacturing	196	—
General Office Building	24.5	—
Parking Lot	0.00	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Other Material Handling Equipment	Diesel	Average	1.00	4.00	200	0.34
Forklifts	Electric	Average	5.00	6.00	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	26.0	310	0.73
Emergency Generator	Diesel	1.00	0.50	12.0	745	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)
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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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	4.89	annual days of extreme heat
Extreme Precipitation	4.25	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	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	1	1	1	2
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	24.9
AQ-PM	83.6
AQ-DPM	89.2
Drinking Water	29.9
Lead Risk Housing	76.7
Pesticides	67.6
Toxic Releases	98.5
Traffic	97.4
Effect Indicators	—
CleanUp Sites	51.7
Groundwater	83.6
Haz Waste Facilities/Generators	96.5
Impaired Water Bodies	0.00
Solid Waste	35.7
Sensitive Population	—
Asthma	32.9
Cardio-vascular	59.8
Low Birth Weights	45.3
Socioeconomic Factor Indicators	—

Education	49.2
Housing	17.9
Linguistic	50.0
Poverty	23.9
Unemployment	23.8

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	81.0727576
Employed	87.052483
Median HI	—
Education	—
Bachelor's or higher	56.75606313
High school enrollment	100
Preschool enrollment	58.3472347
Transportation	—
Auto Access	81.29090209
Active commuting	30.9380213
Social	—
2-parent households	74.59258309
Voting	41.02399589
Neighborhood	—
Alcohol availability	48.54356474
Park access	40.11292185
Retail density	81.09842166
Supermarket access	17.86218401

Tree canopy	50.30155268
Housing	—
Homeownership	79.44308995
Housing habitability	87.43744386
Low-inc homeowner severe housing cost burden	79.21211344
Low-inc renter severe housing cost burden	72.60361863
Uncrowded housing	60.05389452
Health Outcomes	—
Insured adults	66.95752598
Arthritis	44.8
Asthma ER Admissions	48.0
High Blood Pressure	46.3
Cancer (excluding skin)	27.6
Asthma	80.2
Coronary Heart Disease	43.7
Chronic Obstructive Pulmonary Disease	59.8
Diagnosed Diabetes	52.6
Life Expectancy at Birth	47.8
Cognitively Disabled	23.2
Physically Disabled	28.8
Heart Attack ER Admissions	58.5
Mental Health Not Good	68.6
Chronic Kidney Disease	55.3
Obesity	75.7
Pedestrian Injuries	19.6
Physical Health Not Good	59.3
Stroke	51.7
Health Risk Behaviors	—

Binge Drinking	61.9
Current Smoker	67.4
No Leisure Time for Physical Activity	62.4
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	65.5
Elderly	39.0
English Speaking	46.0
Foreign-born	50.5
Outdoor Workers	67.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	23.5
Traffic Density	94.9
Traffic Access	52.6
Other Indices	—
Hardship	22.4
Other Decision Support	—
2016 Voting	44.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	63.0
Healthy Places Index Score for Project Location (b)	77.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
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	78,891 SF warehousing; 157,782 SF of manufacturing; 26,297 SF of office; 552 space parking lot and onsite travel lane and ~29,605 SF (5%) landscaping on a total of 13.59 gross ac. An 18-space parking area will be constructed on ~0.57 acres along Crenshaw Place, adjacent to the project site.
Construction: Construction Phases	The demolition and construction is estimated to occur no sooner than October 2025 and last until approximately April 2027. Demolition is expected to last ~8 weeks.
Construction: Architectural Coatings	SCAQMD Rule 1113 limits paints applied to buildings to 50g/L VOC content.
Operations: Vehicle Data	Trip Gen per rates given in the TIA. Sat and Sun rates from 11th Ed. ITE Trip Gen Manual. W-O trip length increased to 40 miles per SCAQMD recommendations. 20.6 % of warehouse trips (W-O) are truck trips.
Operations: Fleet Mix	Fleet mixed revised per TIA.
Operations: Architectural Coatings	Per SCAQMD Rule 1113 paints applied to buildings is limited to 50g/L VOC content.
Operations: Off-Road Equipment	1 yard goat, modeled as other general industrial equipment (based on SCAQMD white paper data of 3.6 hostlers per million square feet of building area). 5 electric forklifts may be used on-site in the building (based on SCAQMD white paper data of 0.02 forklifts per TSF)
Construction: Trips and VMT	Onsite trucks added to reflect use of water trucks during demolition and grading.
Operations: Emergency Generators and Fire Pumps	Worst-case scenario of 300 HP with 10HP jockey pump fire pump. 745 HP standby-generator.

NOx Emissions

Assumptions

Operation Emission Factors

Max = 6.78

	CalEEMod Emissions		
	lbs/day	g/s	g/s-m ²
Project Operations	6.78	0.036	NA

Operational emissions taken from
CalEEMod output in Appendix B

CO Emissions

Assumptions

Operation Emission Factors

Max = 25

	CalEEMod Emissions		
	lbs/day	g/s	g/s-m ²
Project Operations	25.00	0.131	NA

Operational emissions taken from
CalEEMod output in Appendix B

NO₂-to-NO_x Ratio as a Function of Downwind Distance

Downwind Distance (m)	Modeled Concentration (µg/m ³)	Concentration Location	NO ₂ /NO _x Ratio	NO ₂ Concentration (µg/m ³)	NO ₂ Threshold
20	9.42	DCR 1	0.053	0.50	18.9
50	6.20	DCR 2	0.059	0.37	18.9
70	5.69	DCR 3	0.064	0.36	18.9
100	3.78	DCR 4	0.074	0.28	18.9
200	2.17	DCR 5	0.114	0.25	18.9
500	0.94	DCR 6	0.258	0.24	18.9

Notes:

Uniform Polar Receptor Grid 1 (UPOL1 in AERMOD output) has rings placed at approximately 25, 50, 100, 200, and 500 meters from the modeled operational area boundary as directed in SCAQMD's LST Methodology.

Due to the asymmetrical shape of the modeled operational area and the circular shape of the polar receptor grid, actual distances from the project operational area vary. The initial distance from the project boundary to the 25 meter ring was estimated by trying to place the center of the receptor grid on the project boundary line, closest to the existing receptors

DCR = discrete cartesian receptor point; each point was located at distances of 20, 50, 70, 100, 200, and 500 meters (numbers 1-6); lower numbers are closer to the project boundary

The locations noted above for each receptor distance correspond primarily to areas that are residential landuses. However similar concentrations are shown for areas off of each corner of the construction area and could be alternately used without resulting in a substantial change in the corresponding NO₂ concentration.

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** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/29/2025
** File: C:\Lakes\AERMOD View\19260 190th St Warehouse Ops NOx LST\19260 190th St Warehouse Ops NOx LST.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE 190th St Warehouse
  TITLETWO Operational NOx LST
  MODELOPT DFAULT CONC
  AVERTIME 1 PERIOD
  URBANOPT 9663345 Los_Angeles_County_Population
  POLLUTID NOX
  RUNORNOT RUN
  ERRORFIL "19260 190th St Warehouse Ops NOx LST.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 = SLINE1
** DESCRSRC Onsite mobile and stationary sources
** PREFIX
** Length of Side = 8.44
** Configuration = Adjacent
** Emission Rate = 0.036
** Elevated
** Building Height = 10.97
** SZINIT = 5.10
** Nodes = 19
** 377307.837, 3747420.399, 18.82, 3.50, 3.92
** 377316.626, 3747421.950, 18.95, 3.50, 3.92
** 377329.292, 3747423.759, 19.00, 3.50, 3.92
** 377339.891, 3747425.569, 19.10, 3.50, 3.92
** 377359.536, 3747425.569, 19.15, 3.50, 3.92

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** 377399.086, 3747426.086, 19.50, 3.50, 3.92
** 377425.194, 3747426.086, 19.70, 3.50, 3.92
** 377452.078, 3747426.603, 19.88, 3.50, 3.92
** 377583.136, 3747426.603, 20.33, 3.50, 3.92
** 377588.822, 3747424.793, 20.51, 3.50, 3.92
** 377592.700, 3747419.106, 20.77, 3.50, 3.92
** 377591.149, 3747328.633, 20.31, 3.50, 3.92
** 377591.407, 3747325.789, 19.65, 3.50, 3.92
** 377593.992, 3747322.946, 19.62, 3.50, 3.92
** 377598.128, 3747321.395, 19.60, 3.50, 3.92
** 377601.230, 3747318.810, 19.58, 3.50, 3.92
** 377603.815, 3747313.381, 19.57, 3.50, 3.92
** 377606.917, 3747306.660, 19.61, 3.50, 3.92
** 377607.951, 3747256.254, 19.27, 3.50, 3.92
** -----
LOCATION L0000001    VOLUME 377311.992 3747421.132 18.95
LOCATION L0000002    VOLUME 377320.322 3747422.478 19.02
LOCATION L0000003    VOLUME 377328.675 3747423.671 19.06
LOCATION L0000004    VOLUME 377336.996 3747425.074 19.09
LOCATION L0000005    VOLUME 377345.392 3747425.569 19.12
LOCATION L0000006    VOLUME 377353.831 3747425.569 19.20
LOCATION L0000007    VOLUME 377362.269 3747425.604 19.27
LOCATION L0000008    VOLUME 377370.707 3747425.715 19.35
LOCATION L0000009    VOLUME 377379.144 3747425.825 19.40
LOCATION L0000010    VOLUME 377387.582 3747425.935 19.46
LOCATION L0000011    VOLUME 377396.020 3747426.045 19.51
LOCATION L0000012    VOLUME 377404.458 3747426.086 19.57
LOCATION L0000013    VOLUME 377412.896 3747426.086 19.63
LOCATION L0000014    VOLUME 377421.335 3747426.086 19.69
LOCATION L0000015    VOLUME 377429.772 3747426.174 19.75
LOCATION L0000016    VOLUME 377438.209 3747426.336 19.82
LOCATION L0000017    VOLUME 377446.646 3747426.498 19.88
LOCATION L0000018    VOLUME 377455.083 3747426.603 19.93
LOCATION L0000019    VOLUME 377463.522 3747426.603 19.98
LOCATION L0000020    VOLUME 377471.960 3747426.603 20.03
LOCATION L0000021    VOLUME 377480.398 3747426.603 20.08
LOCATION L0000022    VOLUME 377488.837 3747426.603 20.14
LOCATION L0000023    VOLUME 377497.275 3747426.603 20.20
LOCATION L0000024    VOLUME 377505.714 3747426.603 20.20
LOCATION L0000025    VOLUME 377514.152 3747426.603 20.18
LOCATION L0000026    VOLUME 377522.590 3747426.603 20.16
LOCATION L0000027    VOLUME 377531.029 3747426.603 20.24
LOCATION L0000028    VOLUME 377539.467 3747426.603 20.35
LOCATION L0000029    VOLUME 377547.906 3747426.603 20.46
LOCATION L0000030    VOLUME 377556.344 3747426.603 20.46
LOCATION L0000031    VOLUME 377564.782 3747426.603 20.42
LOCATION L0000032    VOLUME 377573.221 3747426.603 20.38
LOCATION L0000033    VOLUME 377581.659 3747426.603 20.31
LOCATION L0000034    VOLUME 377589.383 3747423.972 20.32
LOCATION L0000035    VOLUME 377592.656 3747416.557 20.50
LOCATION L0000036    VOLUME 377592.512 3747408.120 20.75
LOCATION L0000037    VOLUME 377592.367 3747399.683 20.78
LOCATION L0000038    VOLUME 377592.222 3747391.245 20.71
LOCATION L0000039    VOLUME 377592.078 3747382.808 20.64

```

LOCATION	L0000040	VOLUME	377591.933	3747374.371	20.57
LOCATION	L0000041	VOLUME	377591.788	3747365.934	20.52
LOCATION	L0000042	VOLUME	377591.644	3747357.497	20.47
LOCATION	L0000043	VOLUME	377591.499	3747349.060	20.42
LOCATION	L0000044	VOLUME	377591.354	3747340.623	20.31
LOCATION	L0000045	VOLUME	377591.210	3747332.185	20.10
LOCATION	L0000046	VOLUME	377592.773	3747324.287	19.87
LOCATION	L0000047	VOLUME	377599.825	3747319.981	19.65
LOCATION	L0000048	VOLUME	377604.065	3747312.840	19.57
LOCATION	L0000049	VOLUME	377606.951	3747305.028	19.62
LOCATION	L0000050	VOLUME	377607.124	3747296.592	19.67
LOCATION	L0000051	VOLUME	377607.297	3747288.155	19.72
LOCATION	L0000052	VOLUME	377607.470	3747279.718	19.71
LOCATION	L0000053	VOLUME	377607.643	3747271.282	19.56
LOCATION	L0000054	VOLUME	377607.816	3747262.845	19.40
** End of LINE VOLUME Source ID = SLINE1					
** Source Parameters **					
** LINE VOLUME Source ID = SLINE1					
SRCPARAM	L0000001	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000002	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000003	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000004	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000005	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000006	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000007	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000008	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000009	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000010	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000011	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000012	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000013	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000014	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000015	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000016	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000017	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000018	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000019	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000020	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000021	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000022	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000023	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000024	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000025	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000026	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000027	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000028	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000029	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000030	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000031	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000032	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000033	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000034	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000035	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000036	0.0006666667	3.50	3.92	5.10

SRCPARAM	L0000037	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000038	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000039	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000040	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000041	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000042	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000043	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000044	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000045	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000046	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000047	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000048	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000049	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000050	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000051	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000052	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000053	0.0006666667	3.50	3.92	5.10
SRCPARAM	L0000054	0.0006666667	3.50	3.92	5.10

** -----

URBANSRC ALL

SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED "19260 190th St Warehouse Ops NOx LST.rou"

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE "E:\New MET data\khhr_sfc_pfl\KHR_V11_trimmed.sfc"

PROFFILE "E:\New MET data\khhr_sfc_pfl\KHR_V11_trimmed.pfl"

SURFDATA 3167 2016

UAIRDATA 3190 2016

PROFBASE 19.17 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

** Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST "19260 190TH ST WAREHOUSE OPS NOX LST.AD\01H1GALL.PLT" 31
 PLOTFILE PERIOD ALL "19260 190TH ST WAREHOUSE OPS NOX LST.AD\PE00GALL.PLT" 32
 SUMMFILE "19260 190th St Warehouse Ops NOx LST.sum"
 OU FINISHED

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
 A Total of 2 Warning Message(s)
 A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
 *** NONE ***

***** WARNING MESSAGES *****
 ME W186 205 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
 ME W187 205 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 *** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 23132 ***	*** 190th St Warehouse	***	07/29/25
*** AERMET - VERSION 22112 ***	*** Operational NOx LST	***	10:25:24
			PAGE 1

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

** Model Options Selected:

- * Model Uses Regulatory DEFAULT Options
- * Model Is Setup For Calculation of Average CONCentration Values.
- * NO GAS DEPOSITION Data Provided.
- * NO PARTICLE DEPOSITION Data Provided.
- * Model Uses NO DRY DEPLETION. DDPLETE = F
- * Model Uses NO WET DEPLETION. WETDPLT = F
- * Stack-tip Downwash.
- * Model Accounts for ELEVated Terrain Effects.
- * Use Calms Processing Routine.
- * Use Missing Data Processing Routine.
- * No Exponential Decay.
- * Model Uses URBAN Dispersion Algorithm for the SBL for 54 Source(s),
 for Total of 1 Urban Area(s):
- Urban Population = 9663345.0 ; Urban Roughness Length = 1.000 m
- * Urban Roughness Length of 1.0 Meter Used.
- * ADJ_U* - Use ADJ_U* option for SBL in AERMET
- * CCVR_Sub - Meteorological data includes CCVR substitutions
- * TEMP_Sub - Meteorological data includes TEMP substitutions

* Model Assumes No FLAGPOLE Receptor Heights.
* The User Specified a Pollutant Type of: NOX

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 54 Source(s); 1 Source Group(s); and 186 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 54 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)
and: 0 SWPOINT source(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 22112

**Output Options Selected:
Model Outputs Tables of PERIOD Averages by Receptor
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 19.17 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of RAM.

**Input Runstream File: aermod.inp
**Output Print File: aermod.out

**Detailed Error/Message File: 19260 190th St Warehouse Ops NOx LST.err
**File for Summary of Results: 19260 190th St Warehouse Ops NOx LST.sum

*** AERMOD - VERSION 23132 *** 190th St Warehouse *** 07/29/25
*** AERMET - VERSION 22112 *** Operational NOx LST *** 10:25:24
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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE	NUMBER PART.	EMISSION RATE (GRAMS/SEC)	X	Y	BASE ELEV.	RELEASE HEIGHT	INIT. SY	INIT. SZ	URBAN SOURCE	EMISSION RATE SCALAR VARY	AIRCRAFT
--------	-----------------	------------------------------	---	---	---------------	-------------------	-------------	-------------	-----------------	------------------------------	----------

ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)		BY	
L0000001	0	0.66667E-03	377312.0	3747421.1	18.9	3.50	3.92	5.10	YES		NO
L0000002	0	0.66667E-03	377320.3	3747422.5	19.0	3.50	3.92	5.10	YES		NO
L0000003	0	0.66667E-03	377328.7	3747423.7	19.1	3.50	3.92	5.10	YES		NO
L0000004	0	0.66667E-03	377337.0	3747425.1	19.1	3.50	3.92	5.10	YES		NO
L0000005	0	0.66667E-03	377345.4	3747425.6	19.1	3.50	3.92	5.10	YES		NO
L0000006	0	0.66667E-03	377353.8	3747425.6	19.2	3.50	3.92	5.10	YES		NO
L0000007	0	0.66667E-03	377362.3	3747425.6	19.3	3.50	3.92	5.10	YES		NO
L0000008	0	0.66667E-03	377370.7	3747425.7	19.4	3.50	3.92	5.10	YES		NO
L0000009	0	0.66667E-03	377379.1	3747425.8	19.4	3.50	3.92	5.10	YES		NO
L0000010	0	0.66667E-03	377387.6	3747425.9	19.5	3.50	3.92	5.10	YES		NO
L0000011	0	0.66667E-03	377396.0	3747426.0	19.5	3.50	3.92	5.10	YES		NO
L0000012	0	0.66667E-03	377404.5	3747426.1	19.6	3.50	3.92	5.10	YES		NO
L0000013	0	0.66667E-03	377412.9	3747426.1	19.6	3.50	3.92	5.10	YES		NO
L0000014	0	0.66667E-03	377421.3	3747426.1	19.7	3.50	3.92	5.10	YES		NO
L0000015	0	0.66667E-03	377429.8	3747426.2	19.8	3.50	3.92	5.10	YES		NO
L0000016	0	0.66667E-03	377438.2	3747426.3	19.8	3.50	3.92	5.10	YES		NO
L0000017	0	0.66667E-03	377446.6	3747426.5	19.9	3.50	3.92	5.10	YES		NO
L0000018	0	0.66667E-03	377455.1	3747426.6	19.9	3.50	3.92	5.10	YES		NO
L0000019	0	0.66667E-03	377463.5	3747426.6	20.0	3.50	3.92	5.10	YES		NO
L0000020	0	0.66667E-03	377472.0	3747426.6	20.0	3.50	3.92	5.10	YES		NO
L0000021	0	0.66667E-03	377480.4	3747426.6	20.1	3.50	3.92	5.10	YES		NO
L0000022	0	0.66667E-03	377488.8	3747426.6	20.1	3.50	3.92	5.10	YES		NO
L0000023	0	0.66667E-03	377497.3	3747426.6	20.2	3.50	3.92	5.10	YES		NO
L0000024	0	0.66667E-03	377505.7	3747426.6	20.2	3.50	3.92	5.10	YES		NO
L0000025	0	0.66667E-03	377514.2	3747426.6	20.2	3.50	3.92	5.10	YES		NO
L0000026	0	0.66667E-03	377522.6	3747426.6	20.2	3.50	3.92	5.10	YES		NO
L0000027	0	0.66667E-03	377531.0	3747426.6	20.2	3.50	3.92	5.10	YES		NO
L0000028	0	0.66667E-03	377539.5	3747426.6	20.4	3.50	3.92	5.10	YES		NO
L0000029	0	0.66667E-03	377547.9	3747426.6	20.5	3.50	3.92	5.10	YES		NO
L0000030	0	0.66667E-03	377556.3	3747426.6	20.5	3.50	3.92	5.10	YES		NO
L0000031	0	0.66667E-03	377564.8	3747426.6	20.4	3.50	3.92	5.10	YES		NO
L0000032	0	0.66667E-03	377573.2	3747426.6	20.4	3.50	3.92	5.10	YES		NO
L0000033	0	0.66667E-03	377581.7	3747426.6	20.3	3.50	3.92	5.10	YES		NO
L0000034	0	0.66667E-03	377589.4	3747424.0	20.3	3.50	3.92	5.10	YES		NO
L0000035	0	0.66667E-03	377592.7	3747416.6	20.5	3.50	3.92	5.10	YES		NO
L0000036	0	0.66667E-03	377592.5	3747408.1	20.8	3.50	3.92	5.10	YES		NO
L0000037	0	0.66667E-03	377592.4	3747399.7	20.8	3.50	3.92	5.10	YES		NO
L0000038	0	0.66667E-03	377592.2	3747391.2	20.7	3.50	3.92	5.10	YES		NO
L0000039	0	0.66667E-03	377592.1	3747382.8	20.6	3.50	3.92	5.10	YES		NO
L0000040	0	0.66667E-03	377591.9	3747374.4	20.6	3.50	3.92	5.10	YES		NO

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse

*** AERMET - VERSION 22112 *** *** Operational NOx LST

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
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L0000041	0	0.66667E-03	377591.8	3747365.9	20.5	3.50	3.92	5.10	YES	NO
L0000042	0	0.66667E-03	377591.6	3747357.5	20.5	3.50	3.92	5.10	YES	NO
L0000043	0	0.66667E-03	377591.5	3747349.1	20.4	3.50	3.92	5.10	YES	NO
L0000044	0	0.66667E-03	377591.4	3747340.6	20.3	3.50	3.92	5.10	YES	NO
L0000045	0	0.66667E-03	377591.2	3747332.2	20.1	3.50	3.92	5.10	YES	NO
L0000046	0	0.66667E-03	377592.8	3747324.3	19.9	3.50	3.92	5.10	YES	NO
L0000047	0	0.66667E-03	377599.8	3747320.0	19.7	3.50	3.92	5.10	YES	NO
L0000048	0	0.66667E-03	377604.1	3747312.8	19.6	3.50	3.92	5.10	YES	NO
L0000049	0	0.66667E-03	377607.0	3747305.0	19.6	3.50	3.92	5.10	YES	NO
L0000050	0	0.66667E-03	377607.1	3747296.6	19.7	3.50	3.92	5.10	YES	NO
L0000051	0	0.66667E-03	377607.3	3747288.2	19.7	3.50	3.92	5.10	YES	NO
L0000052	0	0.66667E-03	377607.5	3747279.7	19.7	3.50	3.92	5.10	YES	NO
L0000053	0	0.66667E-03	377607.6	3747271.3	19.6	3.50	3.92	5.10	YES	NO
L0000054	0	0.66667E-03	377607.8	3747262.8	19.4	3.50	3.92	5.10	YES	NO

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

ALL	L0000001	, L0000002	, L0000003	, L0000004	, L0000005	, L0000006	, L0000007	, L0000008	,
	L0000009	, L0000010	, L0000011	, L0000012	, L0000013	, L0000014	, L0000015	, L0000016	,
	L0000017	, L0000018	, L0000019	, L0000020	, L0000021	, L0000022	, L0000023	, L0000024	,
	L0000025	, L0000026	, L0000027	, L0000028	, L0000029	, L0000030	, L0000031	, L0000032	,
	L0000033	, L0000034	, L0000035	, L0000036	, L0000037	, L0000038	, L0000039	, L0000040	,
	L0000041	, L0000042	, L0000043	, L0000044	, L0000045	, L0000046	, L0000047	, L0000048	,
	L0000049	, L0000050	, L0000051	, L0000052	, L0000053	, L0000054	,		

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID

SOURCE IDs

9663345.	L0000001	, L0000002	, L0000003	, L0000004	, L0000005	, L0000006	, L0000007	,
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L0000008 ,

L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,

L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,

L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,

L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,

L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,

L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 ,

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UPOL1 ; NETWORK TYPE: GRIDPOLR ***

*** ORIGIN FOR POLAR NETWORK ***

X-ORIG = 377305.52 ; Y-ORIG = 3747439.87 (METERS)

*** DISTANCE RANGES OF NETWORK ***

(METERS)

25.0, 50.0, 100.0, 200.0, 500.0,

*** DIRECTION RADIALS OF NETWORK ***

(DEGREES)

360.0, 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0,

100.0, 110.0, 120.0, 130.0, 140.0, 150.0, 160.0, 170.0, 180.0, 190.0,

200.0, 210.0, 220.0, 230.0, 240.0, 250.0, 260.0, 270.0, 280.0, 290.0,

300.0, 310.0, 320.0, 330.0, 340.0, 350.0,

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UPOL1 ; NETWORK TYPE: GRIDPOLR ***

* ELEVATION HEIGHTS IN METERS *

DIRECTION	DISTANCE (METERS)				
(DEGREES)	25.00	50.00	100.00	200.00	500.00
360.00	19.00	19.20	19.30	20.10	20.40
10.00	19.10	19.20	19.60	20.30	25.90
20.00	19.10	19.30	19.80	20.40	22.20
30.00	19.10	19.50	19.90	20.40	23.20

40.00	19.20	19.70	19.80	20.40	23.20
50.00	19.20	19.80	20.00	20.30	21.40
60.00	19.20	19.70	20.40	20.20	19.10
70.00	19.20	19.60	20.70	20.10	19.50
80.00	19.20	19.40	20.30	20.00	19.70
90.00	19.20	19.30	19.70	20.10	19.50
100.00	19.10	19.20	19.60	20.20	19.40
110.00	19.10	19.20	19.40	20.10	19.00
120.00	19.10	19.10	19.40	19.70	18.00
130.00	19.00	19.00	19.20	19.50	21.20
140.00	19.00	19.00	19.10	19.20	20.50
150.00	19.00	18.90	19.00	19.00	20.70
160.00	18.90	18.90	18.90	18.70	19.70
170.00	18.90	18.80	18.70	18.40	13.20
180.00	18.80	18.70	18.50	18.00	16.20
190.00	18.80	18.50	18.30	17.80	20.00
200.00	18.70	18.50	17.90	17.70	19.90
210.00	18.70	18.60	18.20	18.10	18.60
220.00	18.80	18.60	18.60	18.10	18.60
230.00	18.80	18.60	18.30	18.00	19.30
240.00	18.80	18.60	18.00	18.30	19.40
250.00	18.80	18.50	17.90	18.40	19.40
260.00	18.90	18.40	18.10	18.00	20.20
270.00	18.90	18.40	18.40	18.50	20.20
280.00	18.90	18.30	18.40	18.20	19.20
290.00	18.90	18.40	18.40	18.40	19.20
300.00	18.90	18.40	18.40	18.60	19.00
310.00	18.90	18.40	18.40	18.40	18.60
320.00	18.90	18.40	18.50	19.10	18.40
330.00	19.00	18.60	18.50	19.30	18.40
340.00	19.00	18.90	18.40	19.70	22.90
350.00	19.00	19.10	18.90	19.90	25.50

*** AERMOD - VERSION 23132 *** *** 190th St Warehouse
 *** AERMET - VERSION 22112 *** *** Operational NOx LST

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UPOL1 ; NETWORK TYPE: GRIDPOLR ***

* HILL HEIGHT SCALES IN METERS *

DIRECTION (DEGREES)	25.00	50.00	100.00	200.00	500.00
360.00	19.00	19.20	19.30	20.10	26.60
10.00	19.10	19.20	19.60	20.30	25.90
20.00	19.10	19.30	19.80	20.40	25.40
30.00	19.10	19.50	19.90	20.40	23.80
40.00	19.20	19.70	19.80	20.40	23.20
50.00	19.20	19.80	20.00	20.30	22.90
60.00	19.20	19.70	20.40	20.20	19.10
70.00	19.20	19.60	20.70	20.10	19.50
80.00	19.20	19.40	20.30	20.00	19.70

90.00	19.20	19.30	19.70	20.10	19.50
100.00	19.10	19.20	19.60	20.20	19.40
110.00	19.10	19.20	19.40	20.10	19.00
120.00	19.10	19.10	19.40	19.70	18.00
130.00	19.00	19.00	19.20	19.50	21.20
140.00	19.00	19.00	19.10	19.20	20.50
150.00	19.00	18.90	19.00	19.00	20.70
160.00	18.90	18.90	18.90	18.70	19.70
170.00	18.90	18.80	18.70	18.40	13.20
180.00	18.80	18.70	18.50	18.00	19.20
190.00	18.80	18.50	18.30	17.80	20.00
200.00	18.70	18.50	17.90	17.70	19.90
210.00	18.70	18.60	18.20	18.10	18.60
220.00	18.80	18.60	18.60	18.10	18.60
230.00	18.80	18.60	18.30	18.00	19.30
240.00	18.80	18.60	18.00	18.30	19.40
250.00	18.80	18.50	17.90	18.40	19.40
260.00	18.90	18.40	18.10	18.00	20.20
270.00	18.90	18.40	18.40	18.50	20.20
280.00	18.90	18.30	18.40	18.20	19.20
290.00	18.90	18.40	18.40	18.40	19.20
300.00	18.90	18.40	18.40	18.60	19.00
310.00	18.90	18.40	18.40	18.40	18.60
320.00	18.90	18.40	18.50	19.10	18.40
330.00	19.00	18.60	18.50	19.30	18.40
340.00	19.00	18.90	18.40	19.70	22.90
350.00	19.00	19.10	18.90	19.90	25.50

*** AERMOD - VERSION 23132 *** *** 190th St Warehouse
 *** AERMET - VERSION 22112 *** *** Operational NOx LST

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
 (METERS)

(377285.1, 3747440.1,	19.0,	19.0,	0.0);	(377256.3, 3747448.6,	18.4,	18.4,	0.0);
(377235.5, 3747440.0,	18.0,	18.0,	0.0);	(377207.0, 3747422.7,	18.1,	18.1,	0.0);
(377105.5, 3747439.9,	18.5,	18.5,	0.0);	(376813.1, 3747526.8,	19.2,	19.2,	0.0);

*** AERMOD - VERSION 23132 *** *** 190th St Warehouse
 *** AERMET - VERSION 22112 *** *** Operational NOx LST

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
 LESS THAN 1.0 METER; WITHIN OPENPIT; OR BEYOND 80KM FOR FASTAREA/FASTALL

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS) YR (METERS)	DISTANCE (METERS)
L0000001	377318.0 3747418.2	-1.73
L0000001	377314.1 3747416.4	-3.24

Name: UNKNOWN
Year: 2016

Name: UNKNOWN
Year: 2016

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
16	01	01	1	01	-10.3	0.136	-9.000	-9.000	-999.	120.		22.1	0.21	1.29	1.00	1.31	333.	7.9	282.0	2.0		
16	01	01	1	02	-10.1	0.135	-9.000	-9.000	-999.	119.		21.9	0.21	1.29	1.00	1.30	344.	7.9	281.4	2.0		
16	01	01	1	03	-9.3	0.129	-9.000	-9.000	-999.	111.		20.9	0.21	1.29	1.00	1.25	352.	7.9	281.4	2.0		
16	01	01	1	04	-10.6	0.138	-9.000	-9.000	-999.	123.		22.5	0.21	1.29	1.00	1.33	358.	7.9	280.9	2.0		
16	01	01	1	05	-10.4	0.136	-9.000	-9.000	-999.	121.		22.2	0.22	1.29	1.00	1.30	322.	7.9	280.3	2.0		
16	01	01	1	06	-13.4	0.156	-9.000	-9.000	-999.	148.		26.8	0.22	1.29	1.00	1.47	325.	7.9	280.9	2.0		
16	01	01	1	07	-9.7	0.132	-9.000	-9.000	-999.	115.		21.4	0.22	1.29	1.00	1.26	329.	7.9	280.3	2.0		
16	01	01	1	08	-16.4	0.202	-9.000	-9.000	-999.	218.		45.6	0.22	1.29	0.55	1.84	15.	7.9	281.4	2.0		
16	01	01	1	09	26.9	0.246	0.362	0.005	64.	293.		-50.4	0.22	1.29	0.32	1.97	24.	7.9	284.2	2.0		
16	01	01	1	10	82.3	0.301	0.834	0.005	256.	396.		-30.1	0.23	1.29	0.24	2.28	36.	7.9	286.4	2.0		
16	01	01	1	11	121.4	0.322	1.193	0.005	509.	439.		-25.0	0.23	1.29	0.21	2.39	42.	7.9	288.8	2.0		
16	01	01	1	12	141.1	0.291	1.349	0.005	633.	376.		-15.8	0.23	1.29	0.20	2.04	38.	7.9	290.3	2.0		
16	01	01	1	13	140.5	0.248	1.576	0.005	1012.	298.		-9.9	0.29	1.29	0.20	1.50	66.	7.9	291.4	2.0		
16	01	01	1	14	119.4	0.218	1.605	0.010	1258.	245.		-7.9	0.23	1.29	0.21	1.38	52.	7.9	291.4	2.0		
16	01	01	1	15	79.4	0.146	1.444	0.011	1376.	135.		-3.5	0.05	1.29	0.24	1.33	103.	7.9	292.0	2.0		
16	01	01	1	16	23.2	0.190	0.963	0.012	1392.	199.		-26.9	0.22	1.29	0.33	1.45	321.	7.9	291.4	2.0		
16	01	01	1	17	-18.8	0.217	-9.000	-9.000	-999.	242.		51.7	0.05	1.29	0.59	2.89	249.	7.9	288.8	2.0		
16	01	01	1	18	-20.1	0.203	-9.000	-9.000	-999.	219.		45.2	0.24	1.29	1.00	1.82	284.	7.9	287.0	2.0		
16	01	01	1	19	-12.0	0.148	-9.000	-9.000	-999.	137.		24.5	0.22	1.29	1.00	1.40	310.	7.9	286.4	2.0		
16	01	01	1	20	-9.7	0.133	-9.000	-9.000	-999.	116.		21.7	0.21	1.29	1.00	1.28	333.	7.9	285.9	2.0		
16	01	01	1	21	-8.5	0.124	-9.000	-9.000	-999.	104.		20.1	0.21	1.29	1.00	1.20	337.	7.9	285.9	2.0		
16	01	01	1	22	-6.7	0.110	-9.000	-9.000	-999.	87.		17.8	0.22	1.29	1.00	1.06	328.	7.9	285.9	2.0		
16	01	01	1	23	-9.7	0.132	-9.000	-9.000	-999.	116.		21.7	0.21	1.29	1.00	1.28	344.	7.9	285.3	2.0		
16	01	01	1	24	-10.5	0.138	-9.000	-9.000	-999.	123.		22.6	0.22	1.29	1.00	1.31	327.	7.9	285.3	2.0		

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
16	01	01	01	7.9	1	333.	1.31	282.1	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 23132 *** *** 190th St Warehouse
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** NETWORK ID: UPOL1 ; NETWORK TYPE: GRIDPOLR ***

** CONC OF NOX IN MICROGRAMS/M**3 **

DIRECTION	DISTANCE (METERS)			
(DEGREES)	25.00	50.00	100.00	200.00 500.00

360.00	1.37870	0.94458	0.55514	0.27622	0.08574
10.00	1.46706	1.02398	0.61110	0.30615	0.08298
20.00	1.57890	1.12940	0.68713	0.34760	0.10209
30.00	1.72080	1.26936	0.79185	0.40605	0.11393
40.00	1.90176	1.45693	0.94079	0.49241	0.13011
50.00	2.13177	1.71673	1.16426	0.63149	0.15586
60.00	2.42912	2.09505	1.52322	0.88116	0.20524
70.00	2.82010	2.67525	2.14953	1.38191	0.30827
80.00	3.34468	3.62140	3.37461	2.55485	0.48092
90.00	4.06440	5.29768	6.24703	6.84479	0.59806
100.00	5.07802	5.49405	5.80399	4.48163	0.56689
110.00	5.03219	5.18802	4.14131	2.19760	0.44318
120.00	4.10357	5.72149	2.56834	1.44126	0.33274
130.00	3.92152	3.97723	1.83843	1.02386	0.26544
140.00	3.82103	3.05058	1.42329	0.76184	0.20937
150.00	2.78349	2.46247	1.15521	0.59348	0.16872
160.00	2.22202	2.05662	0.96848	0.48160	0.14065
170.00	2.66391	1.75171	0.83122	0.40438	0.11927
180.00	2.18126	1.51528	0.72744	0.34905	0.10578
190.00	2.70776	1.32810	0.64759	0.30860	0.09536
200.00	2.26912	1.18542	0.58510	0.27849	0.08706
210.00	1.97577	1.07784	0.53912	0.25627	0.08062
220.00	1.77004	0.99728	0.50518	0.23974	0.07579
230.00	1.61537	0.93895	0.48074	0.22849	0.07242
240.00	1.49852	0.89673	0.46633	0.22284	0.07064
250.00	1.40876	0.86460	0.46023	0.22251	0.07110
260.00	1.34102	0.83949	0.45946	0.22609	0.07418
270.00	1.28749	0.81973	0.46004	0.23146	0.07858
280.00	1.24756	0.80292	0.45877	0.23433	0.08128
290.00	1.21984	0.79142	0.45591	0.23391	0.08052
300.00	1.20376	0.78429	0.45286	0.23088	0.07724
310.00	1.19930	0.78376	0.45200	0.22765	0.07383
320.00	1.20686	0.79149	0.45595	0.22741	0.07220
330.00	1.22822	0.81027	0.46634	0.23118	0.07294
340.00	1.26234	0.84114	0.48472	0.24011	0.07571
350.00	1.31179	0.88498	0.51411	0.25479	0.07292

*** AERMOD - VERSION 23132 *** 190th St Warehouse
 *** AERMET - VERSION 22112 *** Operational NOx LST

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NOX IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
-------------	-------------	------	-------------	-------------	------

377285.10	3747440.08	1.42309	377256.29	3747448.62	0.80314
377235.48	3747439.99	0.62631	377206.99	3747422.66	0.45927
377105.52	3747439.91	0.23144	376813.08	3747526.77	0.08127

*** AERMOD - VERSION 23132 ***
 *** AERMET - VERSION 22112 ***

*** 190th St Warehouse
 *** Operational NOx LST

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** NETWORK ID: UPOL1 ; NETWORK TYPE: GRIDPOLR ***

** CONC OF NOX IN MICROGRAMS/M**3 **

DIRECTION	DISTANCE (METERS)				
(DEGREES)	25.00	50.00	100.00	200.00	500.00
360.0	6.01333 (17120717)	4.59486 (16011002)	2.89552 (16011002)	1.05851 (20082101)	0.38507 (17022017)
10.0	6.10426 (17120717)	4.68193 (16011002)	2.90326 (16011002)	1.05774 (20093007)	0.40107 (17022017)
20.0	6.24340 (17120717)	4.84400 (16011002)	2.99372 (16011002)	1.20203 (20093007)	0.37198 (20093007)
30.0	6.44804 (17120717)	5.09247 (16011002)	3.19179 (16011002)	1.39987 (20093007)	0.41471 (20093007)
40.0	6.73806 (17120717)	5.43759 (17020618)	3.52817 (16011002)	1.68062 (20093007)	0.46947 (20093007)
50.0	7.09711 (17120717)	5.90885 (17020618)	4.06694 (20090705)	2.09928 (20093007)	0.54025 (20093007)
60.0	7.57896 (20022901)	6.52215 (17020618)	4.86489 (20090705)	2.77356 (20101307)	0.82371 (17021622)
70.0	8.45713 (20101307)	7.84129 (20101307)	6.15465 (20101307)	3.99442 (20101307)	1.52363 (17021622)
80.0	9.96184 (20101307)	10.24359 (20101307)	9.00278 (20101307)	6.70007 (20101307)	2.01685 (18021820)
90.0	11.98935 (21121908)	14.44717 (21121908)	15.92139 (21121908)	17.02159 (21121908)	2.38469 (16011823)
100.0	15.12812 (21121908)	15.26907 (17020617)	15.26735 (21121908)	13.09966 (20101307)	2.37467 (21122218)
110.0	17.13033 (17020617)	15.14248 (18051807)	12.37712 (20101307)	6.76084 (20101307)	2.10567 (16021717)
120.0	18.15581 (17020617)	17.51354 (21121908)	7.94783 (20101307)	4.56565 (20101307)	1.60603 (20063007)
130.0	15.10150 (17020617)	12.20261 (20101307)	5.82173 (20101307)	3.32807 (20101307)	1.23317 (17121716)
140.0	12.43597 (18101517)	9.51908 (20101307)	4.57497 (20101307)	2.53605 (20101307)	0.85112 (16121916)
150.0	12.16536 (18051807)	7.75702 (20101307)	3.75188 (20101307)	2.01367 (20093007)	0.61032 (20093007)
160.0	10.22359 (18051807)	6.50849 (20101307)	3.16820 (20101307)	1.65525 (20093007)	0.51248 (20093007)
170.0	10.64415 (18051807)	5.55530 (20101307)	2.73352 (20101307)	1.40137 (20093007)	0.43749 (20093007)
180.0	9.84856 (18051807)	4.80676 (20101307)	2.40036 (20101307)	1.21552 (20093007)	0.38903 (20093007)
190.0	11.41736 (18051807)	4.27509 (16011923)	2.13956 (20101307)	1.07671 (20093007)	0.35130 (20093007)
200.0	11.20490 (18101517)	4.38628 (16011502)	2.00667 (16092803)	0.97079 (20093007)	0.32107 (20093007)
210.0	11.61663 (18101517)	4.77107 (16011502)	2.14965 (16092803)	0.88971 (20093007)	0.29979 (20122416)
220.0	11.71603 (18101517)	5.22834 (20022906)	2.40323 (16092803)	0.98407 (16092803)	0.28008 (20122416)
230.0	11.77610 (17020617)	5.60509 (20022906)	2.78542 (20022906)	1.19031 (16092803)	0.28507 (18042907)
240.0	11.71700 (17020617)	6.52120 (18101517)	3.24198 (20022906)	1.49737 (20022906)	0.36893 (16092803)
250.0	11.16766 (17020617)	6.91386 (18101517)	3.57162 (20022906)	1.90085 (20022906)	0.58178 (20022906)
260.0	10.27644 (17020617)	7.44130 (17020617)	3.77977 (18101517)	2.14059 (20022906)	0.86270 (20022906)
270.0	9.17973 (17020617)	7.12720 (17020617)	4.20663 (17020617)	2.16814 (17020601)	0.93163 (17020623)
280.0	8.07435 (17020617)	6.20480 (17020617)	3.86520 (17020617)	2.17487 (17021624)	0.93819 (17021624)
290.0	7.10199 (16061507)	5.10586 (17020617)	3.53645 (20012722)	2.16903 (20012722)	0.94616 (20012722)
300.0	6.53591 (16061507)	5.00200 (20012722)	3.52551 (17120717)	2.19654 (17120717)	0.93668 (18121024)

310.0	6.27185 (17120717)	4.92382 (17120717)	3.44652 (17120717)	2.10429 (18121024)	0.86094 (21052602)
320.0	6.16678 (17120717)	4.78478 (17120717)	3.31446 (18121024)	1.97453 (16011002)	0.60771 (21052602)
330.0	6.08313 (17120717)	4.64495 (18121024)	3.19114 (16011002)	1.72798 (21052602)	0.36694 (20082101)
340.0	6.01511 (17120717)	4.59761 (18121024)	3.05125 (16011002)	1.44744 (21052602)	0.27329 (20093007)
350.0	5.98931 (17120717)	4.57209 (18121024)	2.95120 (16011002)	1.19781 (17031707)	0.33666 (17022017)

*** AERMOD - VERSION 23132 *** 190th St Warehouse
 *** AERMET - VERSION 22112 *** Operational NOx LST

*** 07/29/25
 *** 10:25:24
 PAGE 16

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . .

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

X-COORD (M)		Y-COORD (M)		CONC (YYMMDDHH)		X-COORD (M)		Y-COORD (M)		CONC (YYMMDDHH)	
377285.10	3747440.08	9.41931	(17020617)	377256.29	3747448.62	6.19983	(17020617)				
377235.48	3747439.99	5.68767	(17020617)	377206.99	3747422.66	3.77914	(18101517)				
377105.52	3747439.91	2.16761	(17020601)	376813.08	3747526.77	0.93800	(17021624)				

*** AERMOD - VERSION 23132 *** 190th St Warehouse
 *** AERMET - VERSION 22112 *** Operational NOx LST

*** 07/29/25
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

GROUP ID		AVERAGE CONC		RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)				OF TYPE		NETWORK GRID-ID	
ALL	1ST HIGHEST VALUE IS	6.84479	AT (377505.52, 3747439.87,	20.10,	20.10,	0.00)	GP	UPOL1			
	2ND HIGHEST VALUE IS	6.24703	AT (377405.52, 3747439.87,	19.70,	19.70,	0.00)	GP	UPOL1			
	3RD HIGHEST VALUE IS	5.80399	AT (377404.00, 3747422.51,	19.60,	19.60,	0.00)	GP	UPOL1			
	4TH HIGHEST VALUE IS	5.72149	AT (377348.82, 3747414.87,	19.10,	19.10,	0.00)	GP	UPOL1			
	5TH HIGHEST VALUE IS	5.49405	AT (377354.76, 3747431.19,	19.20,	19.20,	0.00)	GP	UPOL1			
	6TH HIGHEST VALUE IS	5.29768	AT (377355.52, 3747439.87,	19.30,	19.30,	0.00)	GP	UPOL1			
	7TH HIGHEST VALUE IS	5.18802	AT (377352.50, 3747422.77,	19.20,	19.20,	0.00)	GP	UPOL1			
	8TH HIGHEST VALUE IS	5.07802	AT (377330.14, 3747435.53,	19.10,	19.10,	0.00)	GP	UPOL1			
	9TH HIGHEST VALUE IS	5.03219	AT (377329.01, 3747431.32,	19.10,	19.10,	0.00)	GP	UPOL1			
	10TH HIGHEST VALUE IS	4.48163	AT (377502.48, 3747405.14,	20.20,	20.20,	0.00)	GP	UPOL1			

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART

DP = DISCPOLR
 ^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse *** 07/29/25
 *** AERMET - VERSION 22112 *** *** Operational NOx LST *** 10:25:24
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U* PAGE 18

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF NOX IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL HIGH 1ST HIGH VALUE IS	18.15581	ON 17020617: AT (	377327.17, 3747427.37, 19.10, 19.10, 0.00)	GP	UPOL1

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse *** 07/29/25
 *** AERMET - VERSION 22112 *** *** Operational NOx LST *** 10:25:24
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U* PAGE 19

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
 A Total of 4 Warning Message(s)
 A Total of 1422 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 888 Calm Hours Identified

A Total of 534 Missing Hours Identified (1.22 Percent)

***** FATAL ERROR MESSAGES *****
 *** NONE ***

***** WARNING MESSAGES *****

ME W186 205 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
 ME W187 205 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
 MX W450 26305 CHKDAT: Record Out of Sequence in Meteorological File at: 20010101
 MX W450 26305 CHKDAT: Record Out of Sequence in Meteorological File at: 1 year gap

 *** AERMOD Finishes Successfully ***

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/29/2025
** File: C:\Lakes\AERMOD View\19260 190th St Warehouse Ops CO LST\19260 190th St Warehouse Ops CO LST.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE 190th St Warehouse
  TITLETWO Operational CO LST 1 hour and 8 hour
  MODELOPT DFAULT CONC
  AVERTIME 1 8 PERIOD
  URBANOPT 9663345 Los_Angeles_County_Population
  POLLUTID CO
  RUNORNOT RUN
  ERRORFIL "19260 190th St Warehouse Ops CO LST.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 = SLINE1
** DESCRSRC Onsite mobile and stationary sources
** PREFIX
** Length of Side = 8.44
** Configuration = Adjacent
** Emission Rate = 0.131
** Elevated
** Building Height = 10.97
** SZINIT = 5.10
** Nodes = 19
** 377307.837, 3747420.399, 18.82, 3.50, 3.92

```

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** 377316.626, 3747421.950, 18.95, 3.50, 3.92
** 377329.292, 3747423.759, 19.00, 3.50, 3.92
** 377339.891, 3747425.569, 19.10, 3.50, 3.92
** 377359.536, 3747425.569, 19.15, 3.50, 3.92
** 377399.086, 3747426.086, 19.50, 3.50, 3.92
** 377425.194, 3747426.086, 19.70, 3.50, 3.92
** 377452.078, 3747426.603, 19.88, 3.50, 3.92
** 377583.136, 3747426.603, 20.33, 3.50, 3.92
** 377588.822, 3747424.793, 20.51, 3.50, 3.92
** 377592.700, 3747419.106, 20.77, 3.50, 3.92
** 377591.149, 3747328.633, 20.31, 3.50, 3.92
** 377591.407, 3747325.789, 19.65, 3.50, 3.92
** 377593.992, 3747322.946, 19.62, 3.50, 3.92
** 377598.128, 3747321.395, 19.60, 3.50, 3.92
** 377601.230, 3747318.810, 19.58, 3.50, 3.92
** 377603.815, 3747313.381, 19.57, 3.50, 3.92
** 377606.917, 3747306.660, 19.61, 3.50, 3.92
** 377607.951, 3747256.254, 19.27, 3.50, 3.92
** -----
LOCATION L0000001 VOLUME 377311.992 3747421.132 18.95
LOCATION L0000002 VOLUME 377320.322 3747422.478 19.02
LOCATION L0000003 VOLUME 377328.675 3747423.671 19.06
LOCATION L0000004 VOLUME 377336.996 3747425.074 19.09
LOCATION L0000005 VOLUME 377345.392 3747425.569 19.12
LOCATION L0000006 VOLUME 377353.831 3747425.569 19.20
LOCATION L0000007 VOLUME 377362.269 3747425.604 19.27
LOCATION L0000008 VOLUME 377370.707 3747425.715 19.35
LOCATION L0000009 VOLUME 377379.144 3747425.825 19.40
LOCATION L0000010 VOLUME 377387.582 3747425.935 19.46
LOCATION L0000011 VOLUME 377396.020 3747426.045 19.51
LOCATION L0000012 VOLUME 377404.458 3747426.086 19.57
LOCATION L0000013 VOLUME 377412.896 3747426.086 19.63
LOCATION L0000014 VOLUME 377421.335 3747426.086 19.69
LOCATION L0000015 VOLUME 377429.772 3747426.174 19.75
LOCATION L0000016 VOLUME 377438.209 3747426.336 19.82
LOCATION L0000017 VOLUME 377446.646 3747426.498 19.88
LOCATION L0000018 VOLUME 377455.083 3747426.603 19.93
LOCATION L0000019 VOLUME 377463.522 3747426.603 19.98
LOCATION L0000020 VOLUME 377471.960 3747426.603 20.03
LOCATION L0000021 VOLUME 377480.398 3747426.603 20.08
LOCATION L0000022 VOLUME 377488.837 3747426.603 20.14
LOCATION L0000023 VOLUME 377497.275 3747426.603 20.20
LOCATION L0000024 VOLUME 377505.714 3747426.603 20.20
LOCATION L0000025 VOLUME 377514.152 3747426.603 20.18
LOCATION L0000026 VOLUME 377522.590 3747426.603 20.16
LOCATION L0000027 VOLUME 377531.029 3747426.603 20.24
LOCATION L0000028 VOLUME 377539.467 3747426.603 20.35
LOCATION L0000029 VOLUME 377547.906 3747426.603 20.46
LOCATION L0000030 VOLUME 377556.344 3747426.603 20.46
LOCATION L0000031 VOLUME 377564.782 3747426.603 20.42

```

LOCATION	L0000032	VOLUME	377573.221	3747426.603	20.38
LOCATION	L0000033	VOLUME	377581.659	3747426.603	20.31
LOCATION	L0000034	VOLUME	377589.383	3747423.972	20.32
LOCATION	L0000035	VOLUME	377592.656	3747416.557	20.50
LOCATION	L0000036	VOLUME	377592.512	3747408.120	20.75
LOCATION	L0000037	VOLUME	377592.367	3747399.683	20.78
LOCATION	L0000038	VOLUME	377592.222	3747391.245	20.71
LOCATION	L0000039	VOLUME	377592.078	3747382.808	20.64
LOCATION	L0000040	VOLUME	377591.933	3747374.371	20.57
LOCATION	L0000041	VOLUME	377591.788	3747365.934	20.52
LOCATION	L0000042	VOLUME	377591.644	3747357.497	20.47
LOCATION	L0000043	VOLUME	377591.499	3747349.060	20.42
LOCATION	L0000044	VOLUME	377591.354	3747340.623	20.31
LOCATION	L0000045	VOLUME	377591.210	3747332.185	20.10
LOCATION	L0000046	VOLUME	377592.773	3747324.287	19.87
LOCATION	L0000047	VOLUME	377599.825	3747319.981	19.65
LOCATION	L0000048	VOLUME	377604.065	3747312.840	19.57
LOCATION	L0000049	VOLUME	377606.951	3747305.028	19.62
LOCATION	L0000050	VOLUME	377607.124	3747296.592	19.67
LOCATION	L0000051	VOLUME	377607.297	3747288.155	19.72
LOCATION	L0000052	VOLUME	377607.470	3747279.718	19.71
LOCATION	L0000053	VOLUME	377607.643	3747271.282	19.56
LOCATION	L0000054	VOLUME	377607.816	3747262.845	19.40

** End of LINE VOLUME Source ID = SLINE1

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM	L0000001	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000002	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000003	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000004	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000005	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000006	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000007	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000008	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000009	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000010	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000011	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000012	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000013	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000014	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000015	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000016	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000017	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000018	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000019	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000020	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000021	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000022	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000023	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000024	0.0024259259	3.50	3.92	5.10

SRCPARAM	L0000025	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000026	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000027	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000028	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000029	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000030	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000031	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000032	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000033	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000034	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000035	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000036	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000037	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000038	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000039	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000040	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000041	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000042	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000043	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000044	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000045	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000046	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000047	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000048	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000049	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000050	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000051	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000052	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000053	0.0024259259	3.50	3.92	5.10
SRCPARAM	L0000054	0.0024259259	3.50	3.92	5.10

** -----
 URBANSRC ALL
 SRCGROUP ALL
 SO FINISHED
 **

 ** AERMOD Receptor Pathway

 **
 **
 **
 RE STARTING
 INCLUDED "19260 190th St Warehouse Ops CO LST.rou"
 RE FINISHED
 **

 ** AERMOD Meteorology Pathway

 **
 **
 ME STARTING

```

SURFFILE "E:\New MET data\khhr_sfc_pfl\KHHR_V11_trimmed.sfc"
PROFFILE "E:\New MET data\khhr_sfc_pfl\KHHR_V11_trimmed.pfl"
SURFDATA 3167 2016
UAIRDATA 3190 2016
PROFBASE 19.17 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
  RECTABLE 8 1ST
** Auto-Generated Plotfiles
  PLOTFILE 1 ALL 1ST "19260 190TH ST WAREHOUSE OPS CO LST.AD\01H1GALL.PLT" 31
  PLOTFILE 8 ALL 1ST "19260 190TH ST WAREHOUSE OPS CO LST.AD\08H1GALL.PLT" 32
  PLOTFILE PERIOD ALL "19260 190TH ST WAREHOUSE OPS CO LST.AD\PE00GALL.PLT" 33
  SUMMFILE "19260 190th St Warehouse Ops CO LST.sum"
OU FINISHED

```

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

```

A Total of      0 Fatal Error Message(s)
A Total of      2 Warning Message(s)
A Total of      0 Informational Message(s)

```

***** FATAL ERROR MESSAGES *****
 *** NONE ***

```

***** WARNING MESSAGES *****
ME W186      205      MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used      0.50
ME W187      205      MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

```

 *** SETUP Finishes Successfully ***

```

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse
*** AERMET - VERSION 22112 *** *** Operational CO LST 1 hour and 8 hour

*** MODELOPTs:   RegDEFAULT CONC ELEV URBAN ADJ_U*

```

```

***      07/29/25
***     10:32:54
***     PAGE   1

```

*** MODEL SETUP OPTIONS SUMMARY ***

** Model Options Selected:

- * Model Uses Regulatory DEFAULT Options
- * Model Is Setup For Calculation of Average CONCentration Values.
- * NO GAS DEPOSITION Data Provided.
- * NO PARTICLE DEPOSITION Data Provided.
- * Model Uses NO DRY DEPLETION. DDPLETE = F
- * Model Uses NO WET DEPLETION. WETDPLT = F
- * Stack-tip Downwash.
- * Model Accounts for ELEVated Terrain Effects.
- * Use Calms Processing Routine.
- * Use Missing Data Processing Routine.
- * No Exponential Decay.
- * Model Uses URBAN Dispersion Algorithm for the SBL for 54 Source(s),
for Total of 1 Urban Area(s):
- Urban Population = 9663345.0 ; Urban Roughness Length = 1.000 m
- * Urban Roughness Length of 1.0 Meter Used.
- * ADJ_U* - Use ADJ_U* option for SBL in AERMET
- * CCVR_Sub - Meteorological data includes CCVR substitutions
- * TEMP_Sub - Meteorological data includes TEMP substitutions
- * Model Assumes No FLAGPOLE Receptor Heights.
- * The User Specified a Pollutant Type of: CO

**Model Calculates 2 Short Term Average(s) of: 1-HR 8-HR
and Calculates PERIOD Averages

**This Run Includes: 54 Source(s); 1 Source Group(s); and 180 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 54 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)
and: 0 SWPOINT source(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 22112

**Output Options Selected:

- Model Outputs Tables of PERIOD Averages by Receptor
- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
- Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 19.17 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.6 MB of RAM.

**Input Runstream File: aermod.inp
**Output Print File: aermod.out

**Detailed Error/Message File: 19260 190th St Warehouse Ops CO LST.err

**File for Summary of Results: 19260 190th St Warehouse Ops CO LST.sum

▲ *** AERMOD - VERSION 23132 *** 190th St Warehouse *** 07/29/25
*** AERMET - VERSION 22112 *** Operational CO LST 1 hour and 8 hour *** 10:32:54
PAGE 2

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0000001	0	0.24259E-02	377312.0	3747421.1	18.9	3.50	3.92	5.10	YES		NO
L0000002	0	0.24259E-02	377320.3	3747422.5	19.0	3.50	3.92	5.10	YES		NO
L0000003	0	0.24259E-02	377328.7	3747423.7	19.1	3.50	3.92	5.10	YES		NO
L0000004	0	0.24259E-02	377337.0	3747425.1	19.1	3.50	3.92	5.10	YES		NO
L0000005	0	0.24259E-02	377345.4	3747425.6	19.1	3.50	3.92	5.10	YES		NO
L0000006	0	0.24259E-02	377353.8	3747425.6	19.2	3.50	3.92	5.10	YES		NO
L0000007	0	0.24259E-02	377362.3	3747425.6	19.3	3.50	3.92	5.10	YES		NO
L0000008	0	0.24259E-02	377370.7	3747425.7	19.4	3.50	3.92	5.10	YES		NO
L0000009	0	0.24259E-02	377379.1	3747425.8	19.4	3.50	3.92	5.10	YES		NO
L0000010	0	0.24259E-02	377387.6	3747425.9	19.5	3.50	3.92	5.10	YES		NO
L0000011	0	0.24259E-02	377396.0	3747426.0	19.5	3.50	3.92	5.10	YES		NO
L0000012	0	0.24259E-02	377404.5	3747426.1	19.6	3.50	3.92	5.10	YES		NO
L0000013	0	0.24259E-02	377412.9	3747426.1	19.6	3.50	3.92	5.10	YES		NO
L0000014	0	0.24259E-02	377421.3	3747426.1	19.7	3.50	3.92	5.10	YES		NO
L0000015	0	0.24259E-02	377429.8	3747426.2	19.8	3.50	3.92	5.10	YES		NO
L0000016	0	0.24259E-02	377438.2	3747426.3	19.8	3.50	3.92	5.10	YES		NO
L0000017	0	0.24259E-02	377446.6	3747426.5	19.9	3.50	3.92	5.10	YES		NO
L0000018	0	0.24259E-02	377455.1	3747426.6	19.9	3.50	3.92	5.10	YES		NO
L0000019	0	0.24259E-02	377463.5	3747426.6	20.0	3.50	3.92	5.10	YES		NO
L0000020	0	0.24259E-02	377472.0	3747426.6	20.0	3.50	3.92	5.10	YES		NO
L0000021	0	0.24259E-02	377480.4	3747426.6	20.1	3.50	3.92	5.10	YES		NO

L0000022	0	0.24259E-02	377488.8	3747426.6	20.1	3.50	3.92	5.10	YES	NO
L0000023	0	0.24259E-02	377497.3	3747426.6	20.2	3.50	3.92	5.10	YES	NO
L0000024	0	0.24259E-02	377505.7	3747426.6	20.2	3.50	3.92	5.10	YES	NO
L0000025	0	0.24259E-02	377514.2	3747426.6	20.2	3.50	3.92	5.10	YES	NO
L0000026	0	0.24259E-02	377522.6	3747426.6	20.2	3.50	3.92	5.10	YES	NO
L0000027	0	0.24259E-02	377531.0	3747426.6	20.2	3.50	3.92	5.10	YES	NO
L0000028	0	0.24259E-02	377539.5	3747426.6	20.4	3.50	3.92	5.10	YES	NO
L0000029	0	0.24259E-02	377547.9	3747426.6	20.5	3.50	3.92	5.10	YES	NO
L0000030	0	0.24259E-02	377556.3	3747426.6	20.5	3.50	3.92	5.10	YES	NO
L0000031	0	0.24259E-02	377564.8	3747426.6	20.4	3.50	3.92	5.10	YES	NO
L0000032	0	0.24259E-02	377573.2	3747426.6	20.4	3.50	3.92	5.10	YES	NO
L0000033	0	0.24259E-02	377581.7	3747426.6	20.3	3.50	3.92	5.10	YES	NO
L0000034	0	0.24259E-02	377589.4	3747424.0	20.3	3.50	3.92	5.10	YES	NO
L0000035	0	0.24259E-02	377592.7	3747416.6	20.5	3.50	3.92	5.10	YES	NO
L0000036	0	0.24259E-02	377592.5	3747408.1	20.8	3.50	3.92	5.10	YES	NO
L0000037	0	0.24259E-02	377592.4	3747399.7	20.8	3.50	3.92	5.10	YES	NO
L0000038	0	0.24259E-02	377592.2	3747391.2	20.7	3.50	3.92	5.10	YES	NO
L0000039	0	0.24259E-02	377592.1	3747382.8	20.6	3.50	3.92	5.10	YES	NO
L0000040	0	0.24259E-02	377591.9	3747374.4	20.6	3.50	3.92	5.10	YES	NO

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse ***
 *** AERMET - VERSION 22112 *** *** Operational CO LST 1 hour and 8 hour ***

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0000041	0	0.24259E-02	377591.8	3747365.9	20.5	3.50	3.92	5.10	YES		NO
L0000042	0	0.24259E-02	377591.6	3747357.5	20.5	3.50	3.92	5.10	YES		NO
L0000043	0	0.24259E-02	377591.5	3747349.1	20.4	3.50	3.92	5.10	YES		NO
L0000044	0	0.24259E-02	377591.4	3747340.6	20.3	3.50	3.92	5.10	YES		NO
L0000045	0	0.24259E-02	377591.2	3747332.2	20.1	3.50	3.92	5.10	YES		NO
L0000046	0	0.24259E-02	377592.8	3747324.3	19.9	3.50	3.92	5.10	YES		NO
L0000047	0	0.24259E-02	377599.8	3747320.0	19.7	3.50	3.92	5.10	YES		NO
L0000048	0	0.24259E-02	377604.1	3747312.8	19.6	3.50	3.92	5.10	YES		NO
L0000049	0	0.24259E-02	377607.0	3747305.0	19.6	3.50	3.92	5.10	YES		NO
L0000050	0	0.24259E-02	377607.1	3747296.6	19.7	3.50	3.92	5.10	YES		NO
L0000051	0	0.24259E-02	377607.3	3747288.2	19.7	3.50	3.92	5.10	YES		NO
L0000052	0	0.24259E-02	377607.5	3747279.7	19.7	3.50	3.92	5.10	YES		NO
L0000053	0	0.24259E-02	377607.6	3747271.3	19.6	3.50	3.92	5.10	YES		NO
L0000054	0	0.24259E-02	377607.8	3747262.8	19.4	3.50	3.92	5.10	YES		NO

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse ***
 *** AERMET - VERSION 22112 *** *** Operational CO LST 1 hour and 8 hour ***

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

ALL	L0000001	,	L0000002	,	L0000003	,	L0000004	,	L0000005	,	L0000006	,	L0000007	,	L0000008	,
	L0000009	,	L0000010	,	L0000011	,	L0000012	,	L0000013	,	L0000014	,	L0000015	,	L0000016	,
	L0000017	,	L0000018	,	L0000019	,	L0000020	,	L0000021	,	L0000022	,	L0000023	,	L0000024	,
	L0000025	,	L0000026	,	L0000027	,	L0000028	,	L0000029	,	L0000030	,	L0000031	,	L0000032	,
	L0000033	,	L0000034	,	L0000035	,	L0000036	,	L0000037	,	L0000038	,	L0000039	,	L0000040	,
	L0000041	,	L0000042	,	L0000043	,	L0000044	,	L0000045	,	L0000046	,	L0000047	,	L0000048	,
	L0000049	,	L0000050	,	L0000051	,	L0000052	,	L0000053	,	L0000054	,				

*** AERMOD - VERSION 23132 *** *** 190th St Warehouse *** 07/29/25
 *** AERMET - VERSION 22112 *** *** Operational CO LST 1 hour and 8 hour *** 10:32:54
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*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID URBAN POP

SOURCE IDs

L0000008	9663345.	L0000001	,	L0000002	,	L0000003	,	L0000004	,	L0000005	,	L0000006	,	L0000007	,	
	L0000009	,	L0000010	,	L0000011	,	L0000012	,	L0000013	,	L0000014	,	L0000015	,	L0000016	,
	L0000017	,	L0000018	,	L0000019	,	L0000020	,	L0000021	,	L0000022	,	L0000023	,	L0000024	,
	L0000025	,	L0000026	,	L0000027	,	L0000028	,	L0000029	,	L0000030	,	L0000031	,	L0000032	,
	L0000033	,	L0000034	,	L0000035	,	L0000036	,	L0000037	,	L0000038	,	L0000039	,	L0000040	,
	L0000041	,	L0000042	,	L0000043	,	L0000044	,	L0000045	,	L0000046	,	L0000047	,	L0000048	,
	L0000049	,	L0000050	,	L0000051	,	L0000052	,	L0000053	,	L0000054	,				

*** AERMOD - VERSION 23132 *** *** 190th St Warehouse *** 07/29/25
 *** AERMET - VERSION 22112 *** *** Operational CO LST 1 hour and 8 hour *** 10:32:54
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UPOL1 ; NETWORK TYPE: GRIDPOLR ***

*** ORIGIN FOR POLAR NETWORK ***

X-ORIG = 377305.52 ; Y-ORIG = 3747439.87 (METERS)

*** DISTANCE RANGES OF NETWORK ***
(METERS)

25.0, 50.0, 100.0, 200.0, 500.0,

*** DIRECTION RADIALS OF NETWORK ***
(DEGREES)

360.0, 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0,
100.0, 110.0, 120.0, 130.0, 140.0, 150.0, 160.0, 170.0, 180.0, 190.0,
200.0, 210.0, 220.0, 230.0, 240.0, 250.0, 260.0, 270.0, 280.0, 290.0,
300.0, 310.0, 320.0, 330.0, 340.0, 350.0,

▲ *** AERMOD - VERSION 23132 *** 190th St Warehouse *** 07/29/25
*** AERMET - VERSION 22112 *** Operational CO LST 1 hour and 8 hour *** 10:32:54
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UPOL1 ; NETWORK TYPE: GRIDPOLR ***

* ELEVATION HEIGHTS IN METERS *

DIRECTION (DEGREES)	DISTANCE (METERS)				
	25.00	50.00	100.00	200.00	500.00
360.00	19.00	19.20	19.30	20.10	20.40
10.00	19.10	19.20	19.60	20.30	25.90
20.00	19.10	19.30	19.80	20.40	22.20
30.00	19.10	19.50	19.90	20.40	23.20
40.00	19.20	19.70	19.80	20.40	23.20
50.00	19.20	19.80	20.00	20.30	21.40
60.00	19.20	19.70	20.40	20.20	19.10
70.00	19.20	19.60	20.70	20.10	19.50
80.00	19.20	19.40	20.30	20.00	19.70
90.00	19.20	19.30	19.70	20.10	19.50
100.00	19.10	19.20	19.60	20.20	19.40
110.00	19.10	19.20	19.40	20.10	19.00
120.00	19.10	19.10	19.40	19.70	18.00
130.00	19.00	19.00	19.20	19.50	21.20
140.00	19.00	19.00	19.10	19.20	20.50
150.00	19.00	18.90	19.00	19.00	20.70

160.00	18.90	18.90	18.90	18.70	19.70
170.00	18.90	18.80	18.70	18.40	13.20
180.00	18.80	18.70	18.50	18.00	16.20
190.00	18.80	18.50	18.30	17.80	20.00
200.00	18.70	18.50	17.90	17.70	19.90
210.00	18.70	18.60	18.20	18.10	18.60
220.00	18.80	18.60	18.60	18.10	18.60
230.00	18.80	18.60	18.30	18.00	19.30
240.00	18.80	18.60	18.00	18.30	19.40
250.00	18.80	18.50	17.90	18.40	19.40
260.00	18.90	18.40	18.10	18.00	20.20
270.00	18.90	18.40	18.40	18.50	20.20
280.00	18.90	18.30	18.40	18.20	19.20
290.00	18.90	18.40	18.40	18.40	19.20
300.00	18.90	18.40	18.40	18.60	19.00
310.00	18.90	18.40	18.40	18.40	18.60
320.00	18.90	18.40	18.50	19.10	18.40
330.00	19.00	18.60	18.50	19.30	18.40
340.00	19.00	18.90	18.40	19.70	22.90
350.00	19.00	19.10	18.90	19.90	25.50

*** AERMOD - VERSION 23132 *** *** 190th St Warehouse ***
 *** AERMET - VERSION 22112 *** *** Operational C0 LST 1 hour and 8 hour ***

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UPOL1 ; NETWORK TYPE: GRIDPOLR ***

* HILL HEIGHT SCALES IN METERS *

DIRECTION (DEGREES)	DISTANCE (METERS)				
	25.00	50.00	100.00	200.00	500.00
360.00	19.00	19.20	19.30	20.10	26.60
10.00	19.10	19.20	19.60	20.30	25.90
20.00	19.10	19.30	19.80	20.40	25.40
30.00	19.10	19.50	19.90	20.40	23.80
40.00	19.20	19.70	19.80	20.40	23.20
50.00	19.20	19.80	20.00	20.30	22.90
60.00	19.20	19.70	20.40	20.20	19.10
70.00	19.20	19.60	20.70	20.10	19.50
80.00	19.20	19.40	20.30	20.00	19.70
90.00	19.20	19.30	19.70	20.10	19.50
100.00	19.10	19.20	19.60	20.20	19.40
110.00	19.10	19.20	19.40	20.10	19.00
120.00	19.10	19.10	19.40	19.70	18.00
130.00	19.00	19.00	19.20	19.50	21.20
140.00	19.00	19.00	19.10	19.20	20.50
150.00	19.00	18.90	19.00	19.00	20.70
160.00	18.90	18.90	18.90	18.70	19.70

170.00	18.90	18.80	18.70	18.40	13.20
180.00	18.80	18.70	18.50	18.00	19.20
190.00	18.80	18.50	18.30	17.80	20.00
200.00	18.70	18.50	17.90	17.70	19.90
210.00	18.70	18.60	18.20	18.10	18.60
220.00	18.80	18.60	18.60	18.10	18.60
230.00	18.80	18.60	18.30	18.00	19.30
240.00	18.80	18.60	18.00	18.30	19.40
250.00	18.80	18.50	17.90	18.40	19.40
260.00	18.90	18.40	18.10	18.00	20.20
270.00	18.90	18.40	18.40	18.50	20.20
280.00	18.90	18.30	18.40	18.20	19.20
290.00	18.90	18.40	18.40	18.40	19.20
300.00	18.90	18.40	18.40	18.60	19.00
310.00	18.90	18.40	18.40	18.40	18.60
320.00	18.90	18.40	18.50	19.10	18.40
330.00	19.00	18.60	18.50	19.30	18.40
340.00	19.00	18.90	18.40	19.70	22.90
350.00	19.00	19.10	18.90	19.90	25.50

*** AERMOD - VERSION 23132 *** 190th St Warehouse
 *** AERMET - VERSION 22112 *** Operational CO LST 1 hour and 8 hour
 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

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* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
 LESS THAN 1.0 METER; WITHIN OPENPIT; OR BEYOND 80KM FOR FASTAREA/FASTALL

SOURCE ID	- - RECEPTOR XR (METERS)	LOCATION - - YR (METERS)	DISTANCE (METERS)
L0000001	377318.0	3747418.2	-1.73
L0000001	377314.1	3747416.4	-3.24
L0000001	377309.9	3747415.2	-2.17
L0000001	377305.5	3747414.9	0.58
L0000002	377327.2	3747427.4	-0.01
L0000002	377324.7	3747423.8	-3.88
L0000002	377321.6	3747420.7	-6.26
L0000002	377318.0	3747418.2	-3.59
L0000002	377314.1	3747416.4	0.31
L0000003	377329.0	3747431.3	-0.77
L0000003	377327.2	3747427.4	-4.43
L0000003	377324.7	3747423.8	-4.42
L0000003	377321.6	3747420.7	-0.75
L0000005	377352.5	3747422.8	-0.78
L0000006	377354.8	3747431.2	-2.73
L0000006	377352.5	3747422.8	-5.33
L0000007	377354.8	3747431.2	0.93
L0000011	377404.0	3747422.5	0.30

60.00	8.83929	7.62364	5.54283	3.20643	0.74683
70.00	10.26205	9.73494	7.82189	5.02862	1.12176
80.00	12.17091	13.17788	12.27982	9.29680	1.75002
90.00	14.78991	19.27765	22.73226	24.90743	2.17627
100.00	18.47834	19.99224	21.12006	16.30815	2.06286
110.00	18.31157	18.87864	15.06976	7.99681	1.61267
120.00	14.93243	20.81988	9.34591	5.24457	1.21079
130.00	14.26999	14.47271	6.68983	3.72570	0.96590
140.00	13.90431	11.10072	5.17920	2.77225	0.76187
150.00	10.12880	8.96064	4.20368	2.15961	0.61396
160.00	8.08570	7.48382	3.52419	1.75250	0.51181
170.00	9.69367	6.37429	3.02473	1.47151	0.43399
180.00	7.93738	5.51395	2.64706	1.27015	0.38493
190.00	9.85324	4.83281	2.35652	1.12297	0.34701
200.00	8.25706	4.31362	2.12912	1.01339	0.31680
210.00	7.18962	3.92214	1.96181	0.93255	0.29338
220.00	6.44099	3.62899	1.83831	0.87240	0.27580
230.00	5.87814	3.41673	1.74937	0.83145	0.26352
240.00	5.45296	3.26308	1.69692	0.81090	0.25707
250.00	5.12633	3.14618	1.67472	0.80969	0.25871
260.00	4.87981	3.05480	1.67191	0.82273	0.26994
270.00	4.68504	2.98291	1.67405	0.84226	0.28593
280.00	4.53972	2.92175	1.66941	0.85272	0.29578
290.00	4.43885	2.87990	1.65900	0.85117	0.29299
300.00	4.38034	2.85394	1.64790	0.84016	0.28106
310.00	4.36414	2.85201	1.64477	0.82839	0.26865
320.00	4.39164	2.88015	1.65916	0.82753	0.26272
330.00	4.46937	2.94848	1.69695	0.84122	0.26543
340.00	4.59352	3.06083	1.76385	0.87374	0.27551
350.00	4.77347	3.22034	1.87079	0.92715	0.26533

*** AERMOD - VERSION 23132 *** *** 190th St Warehouse *** 07/29/25
 *** AERMET - VERSION 22112 *** *** Operational CO LST 1 hour and 8 hour *** 10:32:54
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*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** NETWORK ID: UPOL1 ; NETWORK TYPE: GRIDPOLR ***

** CONC OF CO IN MICROGRAMS/M**3 **

DIRECTION (DEGREES)	25.00	50.00	100.00	200.00	500.00
360.0	21.88183 (17120717)	16.72019 (16011002)	10.53646 (16011002)	3.85178 (20082101)	1.40124 (17022017)

10.0	22.21274 (17120717)	17.03700 (16011002)	10.56463 (16011002)	3.84901 (20093007)	1.45945 (17022017)
20.0	22.71903 (17120717)	17.62679 (16011002)	10.89381 (16011002)	4.37407 (20093007)	1.35360 (20093007)
30.0	23.46369 (17120717)	18.53092 (16011002)	11.61456 (16011002)	5.09397 (20093007)	1.50909 (20093007)
40.0	24.51906 (17120717)	19.78680 (17020618)	12.83862 (16011002)	6.11560 (20093007)	1.70835 (20093007)
50.0	25.82559 (17120717)	21.50165 (17020618)	14.79915 (20090705)	7.63903 (20093007)	1.96590 (20093007)
60.0	27.57898 (20022901)	23.73339 (17020618)	17.70281 (20090705)	10.09269 (20101307)	2.99740 (17021622)
70.0	30.77455 (20101307)	28.53358 (20101307)	22.39609 (20101307)	14.53524 (20101307)	5.54433 (17021622)
80.0	36.25004 (20101307)	37.27527 (20101307)	32.76010 (20101307)	24.38080 (20101307)	7.33911 (18021820)
90.0	43.62791 (21121908)	52.57163 (21121908)	57.93616 (21121908)	61.93967 (21121908)	8.67764 (16011823)
100.0	55.04954 (21121908)	55.56246 (17020617)	55.55618 (21121908)	47.66821 (20101307)	8.64117 (21122218)
110.0	62.33535 (17020617)	55.10179 (18051807)	45.03898 (20101307)	24.60193 (20101307)	7.66230 (16021717)
120.0	66.06699 (17020617)	63.72983 (21121908)	28.92125 (20101307)	16.61389 (20101307)	5.84418 (20063007)
130.0	54.95269 (17020617)	44.40394 (20101307)	21.18463 (20101307)	12.11049 (20101307)	4.48736 (17121716)
140.0	45.25312 (18101517)	34.63888 (20101307)	16.64780 (20101307)	9.22840 (20101307)	3.09713 (16121916)
150.0	44.26840 (18051807)	28.22694 (20101307)	13.65267 (20101307)	7.32751 (20093007)	2.22089 (20093007)
160.0	37.20250 (18051807)	23.68367 (20101307)	11.52874 (20101307)	6.02328 (20093007)	1.86487 (20093007)
170.0	38.73287 (18051807)	20.21511 (20101307)	9.94698 (20101307)	5.09943 (20093007)	1.59197 (20093007)
180.0	35.83780 (18051807)	17.49127 (20101307)	8.73464 (20101307)	4.42314 (20093007)	1.41562 (20093007)
190.0	41.54649 (18051807)	15.55658 (16011923)	7.78561 (20101307)	3.91804 (20093007)	1.27835 (20093007)
200.0	40.77339 (18101517)	15.96118 (16011502)	7.30205 (16092803)	3.53258 (20093007)	1.16834 (20093007)
210.0	42.27162 (18101517)	17.36140 (16011502)	7.82232 (16092803)	3.23755 (20093007)	1.09089 (20122416)
220.0	42.63334 (18101517)	19.02536 (20022906)	8.74509 (16092803)	3.58094 (16092803)	1.01919 (20122416)
230.0	42.85191 (17020617)	20.39629 (20022906)	10.13584 (20022906)	4.33142 (16092803)	1.03735 (18042907)
240.0	42.63685 (17020617)	23.72992 (18101517)	11.79719 (20022906)	5.44878 (20022906)	1.34250 (16092803)
250.0	40.63788 (17020617)	25.15878 (18101517)	12.99672 (20022906)	6.91700 (20022906)	2.11703 (20022906)
260.0	37.39481 (17020617)	27.07806 (17020617)	13.75417 (18101517)	7.78937 (20022906)	3.13929 (20022906)
270.0	33.40401 (17020617)	25.93508 (17020617)	15.30745 (17020617)	7.88961 (17020601)	3.39012 (17020623)
280.0	29.38168 (17020617)	22.57859 (17020617)	14.06504 (17020617)	7.91413 (17021624)	3.41397 (17021624)
290.0	25.84336 (16061507)	18.57965 (17020617)	12.86875 (20012722)	7.89287 (20012722)	3.44297 (20012722)
300.0	23.78346 (16061507)	18.20173 (20012722)	12.82894 (17120717)	7.99298 (17120717)	3.40846 (18121024)
310.0	22.82257 (17120717)	17.91722 (17120717)	12.54149 (17120717)	7.65727 (18121024)	3.13286 (21052602)
320.0	22.44023 (17120717)	17.41127 (17120717)	12.06094 (18121024)	7.18510 (16011002)	2.21138 (21052602)
330.0	22.13585 (17120717)	16.90244 (18121024)	11.61222 (16011002)	6.28793 (21052602)	1.33526 (20082101)
340.0	21.88831 (17120717)	16.73018 (18121024)	11.10317 (16011002)	5.26706 (21052602)	0.99446 (20093007)
350.0	21.79443 (17120717)	16.63732 (18121024)	10.73909 (16011002)	4.35869 (17031707)	1.22506 (17022017)

*** AERMOD - VERSION 23132 *** *** 190th St Warehouse *** 07/29/25
 *** AERMET - VERSION 22112 *** *** Operational CO LST 1 hour and 8 hour *** 10:32:54
 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U* *** PAGE 14

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
 L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
 L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
 L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . .

*** NETWORK ID: UPOL1 ; NETWORK TYPE: GRIDPOLR ***

** CONC OF CO IN MICROGRAMS/M**3 **

DIRECTION (DEGREES)	DISTANCE (METERS)				
	25.00	50.00	100.00	200.00	500.00
360.0	17.37791b(17042608)	12.06849b(17042608)	6.11454 (18030208)	2.99796 (18020208)	0.97980 (18020208)
10.0	17.70554b(17042608)	12.28941b(17042608)	6.25304 (18020208)	3.33933 (18020208)	1.05733 (18020208)
20.0	18.22020b(17042608)	12.80497b(17042608)	7.04653 (18020208)	3.79691 (18020208)	1.17062 (18020208)
30.0	18.97489b(17042608)	13.66108b(17042608)	8.10745 (18020208)	4.42508 (18020208)	1.30556 (18020208)
40.0	20.03319b(17042608)	14.90550b(17042608)	9.55975 (18020208)	5.31821 (18020208)	1.47834 (18020208)
50.0	21.36824b(17042608)	16.71477 (18020208)	11.61940 (18020208)	6.65385 (18020208)	1.70134 (18020208)
60.0	23.53047 (18020208)	20.14782 (18020208)	14.68886 (18020208)	8.80537 (18020208)	1.98628 (18020208)
70.0	27.31590 (18020208)	25.18444 (18020208)	19.64602 (18020208)	12.69845 (18020208)	3.34881 (18040524)
80.0	32.34282 (18020208)	33.11636 (18020208)	28.90001 (18020208)	21.38078 (18020208)	5.77117 (17082524)
90.0	39.15900 (18020208)	47.07424 (18020208)	51.96560 (18020208)	55.57104 (18020208)	6.49923m(18060124)
100.0	48.60707 (20112108)	42.93410 (18020208)	49.43733 (18020208)	42.30933 (18020208)	5.40498 (17060808)
110.0	46.06083 (20112108)	44.88847 (18020208)	40.09170 (18020208)	21.54475 (18020208)	3.78526 (18020208)
120.0	37.39420 (18020208)	56.25290 (20112108)	25.45901 (18020208)	14.51398 (18020208)	3.53103 (18020208)
130.0	35.07041 (18020208)	39.77701 (18020208)	18.57737 (18020208)	10.56844 (18020208)	2.94836 (18020208)
140.0	34.31726 (18020208)	30.80070 (18020208)	14.57184 (18020208)	8.04855 (18020208)	2.36042 (18020208)
150.0	27.70279 (18020208)	24.99921 (18020208)	11.93772 (18020208)	6.38090 (18020208)	1.92278 (18020208)
160.0	23.61200 (18020608)	20.91899 (18020208)	10.07392 (18020208)	5.24005 (18020208)	1.61378 (18020208)
170.0	26.70379 (18020208)	17.82159 (18020208)	8.68817 (18020208)	4.43349 (18020208)	1.38260 (18020208)
180.0	22.90358 (18020608)	15.39586 (18020208)	7.62696 (18020208)	3.84428 (18020208)	1.22593 (18020208)
190.0	27.07102 (18020208)	13.45404 (18020208)	6.79672 (18020208)	3.40402 (18020208)	1.10530 (18020208)
200.0	25.23511 (18020608)	11.92390 (18020208)	6.13429 (18020208)	3.06803 (18020208)	1.01006 (18020208)
210.0	24.58456 (18020608)	11.38786 (18020608)	5.61755 (18020208)	2.80985 (18020208)	0.93546 (18020208)
220.0	24.62278 (21012708)	12.39440 (18020608)	5.45707 (18020608)	2.60712 (18020208)	0.87739 (18020208)
230.0	24.32720 (21012708)	13.57709 (18020608)	6.22052 (18020608)	2.46140 (18020608)	0.83228 (18020208)
240.0	23.64795 (21012708)	15.08324 (21012708)	7.31329 (18020608)	3.09669 (18020608)	0.79744 (18020208)
250.0	22.61380 (21012708)	16.08945 (21012708)	8.78867 (21012708)	4.03442 (21012708)	1.03041 (18020608)
260.0	21.35836 (21012708)	16.26177 (21012708)	10.03801 (21012708)	5.27307 (21012708)	1.73131 (21012708)
270.0	20.30709b(17042608)	15.66048 (21012708)	10.44144 (21012708)	6.01156 (21012708)	2.41399 (21012708)
280.0	19.98240b(17042608)	14.87722b(17042608)	9.99317 (17010508)	5.83538 (17010508)	2.40617 (17010508)
290.0	19.53561b(17042608)	14.88331b(17042608)	10.09378b(17042608)	6.03159b(17042608)	2.50818b(17042608)
300.0	19.01330b(17042608)	14.51045b(17042608)	9.82221b(17042608)	5.70383b(17042608)	2.21631 (18030208)
310.0	18.47446b(17042608)	13.91875b(17042608)	9.12070b(17042608)	5.08921 (18030208)	1.64976 (18030208)
320.0	17.98102b(17042608)	13.25774b(17042608)	8.34751 (18030208)	4.25007 (18030208)	0.90878 (18030208)
330.0	17.62107b(17042608)	12.69925b(17042608)	7.58246 (18030208)	3.32322 (18030208)	0.81830 (18020208)
340.0	17.36755b(17042608)	12.30320b(17042608)	6.89692 (18030208)	2.54277 (18020208)	0.85971 (18020208)
350.0	17.28084b(17042608)	12.08228b(17042608)	6.41994 (18030208)	2.73953 (18020208)	0.90834 (18020208)

*** AERMOD - VERSION 23132 *** 190th St Warehouse *** 07/29/25
 *** AERMET - VERSION 22112 *** Operational C0 LST 1 hour and 8 hour *** 10:32:54
 *** MODELOPTS: RegDEFAULT CONC ELEV URBAN ADJ_U* *** PAGE 15

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF CO IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	24.90743 AT (377505.52, 3747439.87, 20.10, 20.10, 0.00)	GP	UPOL1	
	2ND HIGHEST VALUE IS	22.73226 AT (377405.52, 3747439.87, 19.70, 19.70, 0.00)	GP	UPOL1	
	3RD HIGHEST VALUE IS	21.12006 AT (377404.00, 3747422.51, 19.60, 19.60, 0.00)	GP	UPOL1	
	4TH HIGHEST VALUE IS	20.81988 AT (377348.82, 3747414.87, 19.10, 19.10, 0.00)	GP	UPOL1	
	5TH HIGHEST VALUE IS	19.99224 AT (377354.76, 3747431.19, 19.20, 19.20, 0.00)	GP	UPOL1	
	6TH HIGHEST VALUE IS	19.27765 AT (377355.52, 3747439.87, 19.30, 19.30, 0.00)	GP	UPOL1	
	7TH HIGHEST VALUE IS	18.87864 AT (377352.50, 3747422.77, 19.20, 19.20, 0.00)	GP	UPOL1	
	8TH HIGHEST VALUE IS	18.47834 AT (377330.14, 3747435.53, 19.10, 19.10, 0.00)	GP	UPOL1	
	9TH HIGHEST VALUE IS	18.31157 AT (377329.01, 3747431.32, 19.10, 19.10, 0.00)	GP	UPOL1	
	10TH HIGHEST VALUE IS	16.30815 AT (377502.48, 3747405.14, 20.20, 20.20, 0.00)	GP	UPOL1	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** AERMOD - VERSION 23132 *** 190th St Warehouse
*** AERMET - VERSION 22112 *** Operational CO LST 1 hour and 8 hour

*** 07/29/25
*** 10:32:54
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF CO IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	66.06699	ON 17020617:	AT (377327.17, 3747427.37, 19.10, 19.10, 0.00)	GP	UPOL1

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** AERMOD - VERSION 23132 *** 190th St Warehouse
*** AERMET - VERSION 22112 *** Operational CO LST 1 hour and 8 hour

*** 07/29/25
*** 10:32:54
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF CO IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
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ALL	HIGH	1ST HIGH VALUE IS	56.25290 ON 20112108: AT (377348.82, 3747414.87, 19.10, 19.10, 0.00)	GP	UPOL1
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*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse *** 07/29/25
*** AERMET - VERSION 22112 *** *** Operational CO LST 1 hour and 8 hour *** 10:32:54
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 4 Warning Message(s)
A Total of 1422 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 888 Calm Hours Identified

A Total of 534 Missing Hours Identified (1.22 Percent)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 205 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187 205 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
MX W450 26305 CHKDAT: Record Out of Sequence in Meteorological File at: 20010101
MX W450 26305 CHKDAT: Record Out of Sequence in Meteorological File at: 1 year gap

*** AERMOD Finishes Successfully ***

Source: EMFAC2025 (v2.0.0) Emissions Inventory

Region Type: Air District

Region: South Coast AQMD

Calendar Year: 2025

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption, kWh/day for Energy Consumption, kg/day for Hydrogen Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Trips	Energy Consumption	Fuel Consumption	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	Total VMT	Total VMT	Miles Per Gallon	Vehicle Class
South Coast AQMD	2025	HHDT	Aggregate	Aggregate	Gasoline	131.2355586	2625.761057		0	1.564670316	1564.670316	2426216.18	6049.117384	15043764.38	6.20	HHDT
South Coast AQMD	2025	HHDT	Aggregate	Aggregate	Diesel	104477.8569	1784107.58		0	2304.716109	2304716.109		14216576.36			
South Coast AQMD	2025	HHDT	Aggregate	Aggregate	Electricity	824.14685	9278.369157	141573.7714		0	0		79290.20775			
South Coast AQMD	2025	HHDT	Aggregate	Aggregate	Natural Gas	9600.727342	73036.08278		0	119.9354002	119935.4002		739228.8342			
South Coast AQMD	2025	HHDT	Aggregate	Aggregate	Fuel Cell Electric Vehicle	23.64691619	364.8386		0	0	0		2619.861818			
South Coast AQMD	2025	LDA	Aggregate	Aggregate	Gasoline	4749626.323	20867536.99		0	5403.11242	5403112.42	5518784.156	138485269.7	170434398.1	30.88	LDA
South Coast AQMD	2025	LDA	Aggregate	Aggregate	Diesel	12244.42586	49243.72256		0	8.463584618	8463.584618		295180.4541			
South Coast AQMD	2025	LDA	Aggregate	Aggregate	Electricity	642962.4432	3212913.574	8692311.306		0	0		26151721.87			
South Coast AQMD	2025	LDA	Aggregate	Aggregate	Plug-in Hybrid	138738.083	569713.7187	991306.2625		107.208151	107208.151		5502226.142			
South Coast AQMD	2025	LDT1	Aggregate	Aggregate	Gasoline	478541.5404	1977882.277		0	645.1885559	645188.5559	646201.1373	14012478.48	14189596.31	21.96	LDT1
South Coast AQMD	2025	LDT1	Aggregate	Aggregate	Diesel	220.9992038	607.2662154		0	0.225444797	225.4447972		4767.777575			
South Coast AQMD	2025	LDT1	Aggregate	Aggregate	Electricity	2981.843875	14572.54446	49664.01693		0	0		132866.9118			
South Coast AQMD	2025	LDT1	Aggregate	Aggregate	Plug-in Hybrid	821.1457553	3347.89106	8091.801289		0.787136573	787.136573		39483.13947			
South Coast AQMD	2025	LDT2	Aggregate	Aggregate	Gasoline	2581375.075	12500638.26		0	4109.95971	4109959.71	4146191.96	88984404.72	92938440.84	22.42	LDT2
South Coast AQMD	2025	LDT2	Aggregate	Aggregate	Diesel	4731.25326	23206.2799		0	5.698230946	5698.230946		161021.6021			
South Coast AQMD	2025	LDT2	Aggregate	Aggregate	Electricity	48907.01505	262320.4501	947255.616		0	0		2281469.891			
South Coast AQMD	2025	LDT2	Aggregate	Aggregate	Plug-in Hybrid	32275.03508	137687.5553	349769.7932		30.53401966	30534.01966		1511544.625			
South Coast AQMD	2025	LHDT1	Aggregate	Aggregate	Gasoline	193741.379	2785817.469		0	458.7839609	458783.9609	602633.5924	6234817.229	9244749.304	15.34	LHDT1
South Coast AQMD	2025	LHDT1	Aggregate	Aggregate	Diesel	88644.43052	1076158.147		0	143.8496315	143849.6315		2934852.625			
South Coast AQMD	2025	LHDT1	Aggregate	Aggregate	Electricity	1367.678519	18082.0887	42108.11521		0	0		75079.44974			
South Coast AQMD	2025	LHDT2	Aggregate	Aggregate	Gasoline	37491.868	610764.206		0	106.4293305	106429.3305	259495.165	1344726.046	4155129.538	16.01	LHDT2
South Coast AQMD	2025	LHDT2	Aggregate	Aggregate	Diesel	64182.23059	882766.161		0	153.0658344	153065.8344		2738883.79			
South Coast AQMD	2025	LHDT2	Aggregate	Aggregate	Electricity	1238.085929	18544.77567	40111.15082		0	0	0	71519.70248			
South Coast AQMD	2025	MCY	Aggregate	Aggregate	Gasoline	241580.3378	462607.8222		0	35.20541401	35205.41401	35205.41401	1366279.587	1366279.587	38.81	MCY
South Coast AQMD	2025	MDV	Aggregate	Aggregate	Gasoline	1628904.953	7468667.465		0	3114.326957	3114326.957	3196902.084	54966294.19	58931072.45	18.43	MDV
South Coast AQMD	2025	MDV	Aggregate	Aggregate	Diesel	38658.40698	188724.9306		0	65.92299149	65922.99149		1540295.395			
South Coast AQMD	2025	MDV	Aggregate	Aggregate	Electricity	34678.8183	177803.862	797602.7693		0	0		1608808.644			
South Coast AQMD	2025	MDV	Aggregate	Aggregate	Plug-in Hybrid	17921.75972	74240.79126	234628.8317		16.65213545	16652.13545		815674.2173			
South Coast AQMD	2025	MH	Aggregate	Aggregate	Gasoline	34141.43342	3635.0173		0	60.85131219	60851.31219	72897.03671	295528.2644	417090.2497	5.72	MH
South Coast AQMD	2025	MH	Aggregate	Aggregate	Diesel	13668.58316	1454.703713		0	12.04572452	12045.72452		121561.9853			
South Coast AQMD	2025	MHDT	Aggregate	Aggregate	Gasoline	31966.50532	639585.8385		0	276.9991933	276999.1933	761333.0225	1447781.06	5787177.717	7.60	MHDT
South Coast AQMD	2025	MHDT	Aggregate	Aggregate	Diesel	113251.5746	1400902.54		0	479.1967222	479196.7222		4233193.155			
South Coast AQMD	2025	MHDT	Aggregate	Aggregate	Electricity	1155.499322	16060.72281	79093.04181		0	0		63505.56589			
South Coast AQMD	2025	MHDT	Aggregate	Aggregate	Natural Gas	1008.659004	9454.054113		0	5.137107025	5137.107025		42408.33119			
South Coast AQMD	2025	MHDT	Aggregate	Aggregate	Fuel Cell Electric Vehicle	3.899779785	48.36565984		0	0	0		289.6046879			
South Coast AQMD	2025	OBUS	Aggregate	Aggregate	Gasoline	5531.660136	49251.46792		0	33.67889231	33678.89231	54555.95991	168797.2799	374805.5806	6.87	OBUS
South Coast AQMD	2025	OBUS	Aggregate	Aggregate	Diesel	2666.559669	30069.6883		0	20.77674095	20776.74095		155088.1491			
South Coast AQMD	2025	OBUS	Aggregate	Aggregate	Electricity	243.7105385	2169.048254	21076.27902		0	0		16870.6638			
South Coast AQMD	2025	OBUS	Aggregate	Aggregate	Natural Gas	654.8163878	5827.865851		0	0.100326647	100.3266474		34049.48785			
South Coast AQMD	2025	SBUS	Aggregate	Aggregate	Gasoline	2599.88863	10399.55452		0	10.82076847	10820.76847	37322.22832	97763.2984	235530.2271	6.31	SBUS
South Coast AQMD	2025	SBUS	Aggregate	Aggregate	Diesel	2672.691898	38700.57869		0	7.240350804	7240.350804		53091.81268			
South Coast AQMD	2025	SBUS	Aggregate	Aggregate	Electricity	114.4392323	1458.321821	4962.93651		0	0		3611.321371			
South Coast AQMD	2025	SBUS	Aggregate	Aggregate	Natural Gas	3297.306555	47744.99892		0	19.26110905	19261.10905		81063.79461			
South Coast AQMD	2025	UBUS	Aggregate	Aggregate	Gasoline	830.422956	3321.691824		0	10.5665847	10566.5847	143446.2309	52657.08881	540510.945	3.77	UBUS
South Coast AQMD	2025	UBUS	Aggregate	Aggregate	Diesel	20.97555205	83.9022082		0	0.236292004	236.292004		1539.85708			
South Coast AQMD	2025	UBUS	Aggregate	Aggregate	Electricity	407.6956533	1630.782613	69687.19197		0	0		33050.95799			
South Coast AQMD	2025	UBUS	Aggregate	Aggregate	Natural Gas	5045.738347	20182.95339		0	132.6433542	132643.3542		453263.0411			

Source: EMFAC2025 (v2.0.0) Emissions Inventory

Region Type: Air District

Region: South Coast AQMD

Calendar Year: 2027

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption, kWh/day for Energy Consumption, kg/day for Hydrogen Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Trips	Energy Consumption	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	Total VMT	Total VMT	Miles Per Gallon	Vehicle Class
South Coast AQMD	2027	HHDT	Aggregate	Aggregate	Gasoline	119.9786149	2400.532126	0	1.292650238	1292.650238	2420026.055	5039.865379	15675795.96	6.48	HHDT
South Coast AQMD	2027	HHDT	Aggregate	Aggregate	Diesel	104694.0021	1818986.48	0	2293.100573	2293100.573		14655111.19			
South Coast AQMD	2027	HHDT	Aggregate	Aggregate	Electricity	2048.439829	22790.91162	358530.2626	0	0		200153.3208			
South Coast AQMD	2027	HHDT	Aggregate	Aggregate	Natural Gas	9793.413351	77143.02502	0	125.6328317	125632.8317		794671.9193			
South Coast AQMD	2027	HHDT	Aggregate	Aggregate	Fuel Cell Electric Vehicle	190.8121152	2610.877708	0	0	0		20819.66565			
South Coast AQMD	2027	LDA	Aggregate	Aggregate	Gasoline	4365511.132	18790859.6	0	4660.5255	4660525.5	4772804.332	122279941.4	163168594.6	34.19	LDA
South Coast AQMD	2027	LDA	Aggregate	Aggregate	Diesel	9374.916105	37310.46311	0	5.984296501	5984.296501		213725.4271			
South Coast AQMD	2027	LDA	Aggregate	Aggregate	Electricity	892627.1326	4386393.825	11497838.87	0	0		34592443.11			
South Coast AQMD	2027	LDA	Aggregate	Aggregate	Plug-in Hybrid	156262.2919	599542.8206	1159139.896	106.2945353	106294.5353		5933241.824			
South Coast AQMD	2027	LDA	Aggregate	Aggregate	Fuel Cell Electric Vehicle	3418.7149	17300.75242	0	0	0		149242.8582			
South Coast AQMD	2027	LDT1	Aggregate	Aggregate	Gasoline	459882.6443	1881474.665	0	592.399392	592399.392	593424.6111	13188498.87	13734669.59	23.14	LDT1
South Coast AQMD	2027	LDT1	Aggregate	Aggregate	Diesel	100.2449672	271.2040272	0	0.096666669	96.66666864		2123.159791			
South Coast AQMD	2027	LDT1	Aggregate	Aggregate	Electricity	10763.06354	53538.95125	185167.7814	0	0		495382.2262			
South Coast AQMD	2027	LDT1	Aggregate	Aggregate	Plug-in Hybrid	1079.672946	4388.265323	10462.53611	0.928552373	928.5523735		48665.33966			
South Coast AQMD	2027	LDT2	Aggregate	Aggregate	Gasoline	2600590.744	12465380.81	0	3892.623714	3892623.714	3930540.381	87049580.58	95214883.33	24.22	LDT2
South Coast AQMD	2027	LDT2	Aggregate	Aggregate	Diesel	4676.709905	22628.7652	0	5.026311659	5026.311659		152488.5502			
South Coast AQMD	2027	LDT2	Aggregate	Aggregate	Electricity	139704.1679	741782.9182	2625236.408	0	0		6322895.024			
South Coast AQMD	2027	LDT2	Aggregate	Aggregate	Plug-in Hybrid	38886.58273	164225.3397	407959.5862	32.89035512	32890.35512		1689919.181			
South Coast AQMD	2027	LHDT1	Aggregate	Aggregate	Gasoline	191914.015	2742556.87	0	432.8421995	432842.1995	576127.615	6082376.492	9275785.606	16.10	LHDT1
South Coast AQMD	2027	LHDT1	Aggregate	Aggregate	Diesel	90403.37187	1090756.858	0	143.2854155	143285.4155		2955380.11			
South Coast AQMD	2027	LHDT1	Aggregate	Aggregate	Electricity	4425.508401	58149.55811	128989.6184	0	0		229727.2126			
South Coast AQMD	2027	LHDT1	Aggregate	Aggregate	Fuel Cell Electric Vehicle	150.1055419	1972.331796	0	0	0		8301.791528			
South Coast AQMD	2027	LHDT2	Aggregate	Aggregate	Gasoline	39728.80291	645137.5727	0	108.3207185	108320.7185	289525.6163	1417530.56	4928990.048	17.02	LHDT2
South Coast AQMD	2027	LHDT2	Aggregate	Aggregate	Diesel	78414.06531	1075066.179	0	181.2048979	181204.8979		3287229.466			
South Coast AQMD	2027	LHDT2	Aggregate	Aggregate	Electricity	3979.226782	59412.77618	121425.8093	0	0		216259.1042			
South Coast AQMD	2027	LHDT2	Aggregate	Aggregate	Fuel Cell Electric Vehicle	136.4289318	2036.984076	0	0	0		7970.917739			
South Coast AQMD	2027	MCY	Aggregate	Aggregate	Gasoline	254728.5887	486986.1576	0	36.57939924	36579.39924	36579.39924	1430122.847	1430122.847	39.10	MCY
South Coast AQMD	2027	MDV	Aggregate	Aggregate	Gasoline	1618820.697	7358740.919	0	2922.694912	2922694.912	3015161.927	53179824.35	59989685.86	19.90	MDV
South Coast AQMD	2027	MDV	Aggregate	Aggregate	Diesel	47020.27838	228043.5937	0	75.30264779	75302.64779		1818861.373			
South Coast AQMD	2027	MDV	Aggregate	Aggregate	Electricity	91375.07592	464811.4825	2045338.623	0	0		4125560.471			
South Coast AQMD	2027	MDV	Aggregate	Aggregate	Plug-in Hybrid	20461.94439	84439.02726	257951.2217	17.16436773	17164.36773		865439.6645			
South Coast AQMD	2027	MH	Aggregate	Aggregate	Gasoline	33466.17076	3539.789516	0	59.46696905	59466.96905	71263.87491	288683.0254	407607.4308	5.72	MH
South Coast AQMD	2027	MH	Aggregate	Aggregate	Diesel	13701.47309	1448.655084	0	11.79690586	11796.90586		118924.4054			
South Coast AQMD	2027	MHDT	Aggregate	Aggregate	Gasoline	32148.25779	643222.3418	0	264.8952811	264895.2811	748699.541	1407853.777	5863876.453	7.83	MHDT
South Coast AQMD	2027	MHDT	Aggregate	Aggregate	Diesel	116061.9004	1443963.469	0	478.7104043	478710.4043		4257281.212			
South Coast AQMD	2027	MHDT	Aggregate	Aggregate	Electricity	2943.358157	41107.92823	186208.1314	0	0		149355.6804			
South Coast AQMD	2027	MHDT	Aggregate	Aggregate	Natural Gas	1024.249077	9841.671534	0	5.093855548	5093.855548		42312.17361			
South Coast AQMD	2027	MHDT	Aggregate	Aggregate	Fuel Cell Electric Vehicle	144.1969835	1937.368633	0	0	0		7073.609926			
South Coast AQMD	2027	OBUS	Aggregate	Aggregate	Gasoline	5068.871427	45131.00088	0	27.61773216	27617.73216	48504.93981	139612.4062	355633.64	7.33	OBUS
South Coast AQMD	2027	OBUS	Aggregate	Aggregate	Diesel	2755.436213	31652.33698	0	20.78277992	20782.77992		157476.1075			
South Coast AQMD	2027	OBUS	Aggregate	Aggregate	Electricity	353.4659414	3146.020074	29598.65629	0	0		23700.17249			
South Coast AQMD	2027	OBUS	Aggregate	Aggregate	Natural Gas	684.0796199	6088.308618	0	0.104427732	104.4277324		34475.41249			
South Coast AQMD	2027	OBUS	Aggregate	Aggregate	Fuel Cell Electric Vehicle	5.536786082	49.29162889	0	0	0		369.5413599			
South Coast AQMD	2027	SBUS	Aggregate	Aggregate	Gasoline	2717.237286	10868.94914	0	10.92072148	10920.72148	36671.00046	100365.3766	235245.0844	6.42	SBUS
South Coast AQMD	2027	SBUS	Aggregate	Aggregate	Diesel	2489.694284	36050.77323	0	6.626060217	6626.060217		48703.69586			
South Coast AQMD	2027	SBUS	Aggregate	Aggregate	Electricity	172.1054183	1919.863268	7446.385549	0	0		5418.423391			
South Coast AQMD	2027	SBUS	Aggregate	Aggregate	Natural Gas	3381.410404	48962.82264	0	19.12421876	19124.21876		80657.45538			
South Coast AQMD	2027	SBUS	Aggregate	Aggregate	Fuel Cell Electric Vehicle	3.257529209	29.0674379	0	0	0		100.1331783			
South Coast AQMD	2027	UBUS	Aggregate	Aggregate	Gasoline	822.035363	3288.141452	0	10.18350243	10183.50243	140523.1623	51797.79747	548875.381	3.91	UBUS
South Coast AQMD	2027	UBUS	Aggregate	Aggregate	Diesel	13.70031546	54.80126183	0	0.158722274	158.7222743		1015.80099			
South Coast AQMD	2027	UBUS	Aggregate	Aggregate	Electricity	544.0381808	2176.152723	95169.1611	0	0		45263.75017			
South Coast AQMD	2027	UBUS	Aggregate	Aggregate	Natural Gas	5012.852052	20051.40821	0	130.1809376	130180.9376		449914.0936			
South Coast AQMD	2027	UBUS	Aggregate	Aggregate	Fuel Cell Electric Vehicle	9.774220621	39.09688248	0	0	0		883.9388065			



May 29, 2025

Sergio Valentini
Ware Malcomb
10 Edelman
Irvine, CA 92618

Re: Preliminary Fire Pump & Generator Sizing (Rev. 1)
Comstock Properties
2555 W. 190th Street
Torrance, CA 90504

Dear Sergio,

At your request, we conducted a preliminary evaluation of the proposed building and based on information provided to us, estimated preliminary sizes for a fire pump and standby generator. We understand that this information is intended for use in responding to entitlement review comments received from South Coast Air Quality Management District (SCAQMD). Documents provided to us included:

- Conceptual Site Plan for the project prepared by Ware Malcomb and dated 12/16/2024
- Fire Hydrant Flow Test conducted by City of Torrance Water Department on 4/25/2025

Based on the drawing and based on our experience with other similar buildings, we assumed open steel bar joists supporting the roof deck with fire sprinkler piping running through the joist spaces. We also assumed a basic grid sprinkler piping system for the building with the fire pump located in the least favorable location.

Based on the information provided, we estimate that the building would require a fire pump sized for 1,500 GPM at 100 PSI with a 125 HP motor (460/3/60). The jockey pump would be 5 HP. The water service would likely be 8 inches. This pump would supply an ESFR sprinkler system to protect Class 1 through 4 commodities and Group A plastics in rack storage up to a 35-foot maximum storage height under a maximum underside of deck/ceiling height of 40 feet, which is based on the 36-foot clear height noted on the drawing. Most foreseeable manufacturing hazards would have a lower demand than this hypothetical storage protection criteria. Regarding Group A plastics, this pump would protect exposed unexpanded plastics but not exposed-expanded plastics.

For the standby generator, we assumed that the generator would be sized for the fire pump only (emergency lighting would be on backup battery packs). For this 1,500-gpm fire



pump, the building would require a 300-kW generator. The generator engine would be approximately 500 HP.

We also looked at a worst-case scenario: protecting storage of Group A exposed-expanded plastics. Under this scenario, a pump sized for 2,000 GPM at 150 PSI with a 300 HP motor would be required. The Jockey pump would be 10 HP, and the water service would be 10 inches. A 500-kW standby generator could be used for this scenario, and the engine would be approximately 745 HP.

Please contact me if you have any questions or wish to discuss this further.

Sincerely,

A handwritten signature in black ink, reading 'Michael Best'.

Michael Best, P.E.
RTM Engineering Consultants

A handwritten signature in blue ink, reading 'Ben Lieberman'.

Ben Lieberman, P.E.
RTM Engineering Consultants

cc: Tiffany Sukay
Comstock Properties



APPENDIX C

HRA DATA AND AERMOD MODEL PRINTOUTS

Emission Assumptions	DPM	Emissions
19260 190th Street Warehouse		

Facility Operations

Buildout year: 2027

Emission Factors

1) Onsite Vehicle Emissions

a) Truck

(1) EMFAC2025 - PM10 used as surrogate for DPM

(a) Annual Meteorology

Temperature: 66 degF

Relative Humidity: 60%

(b) Calculations for Los Angeles County

(c) Truck Mix

4+ axle heavy-heavy duty diesel trucks (HHDT)

4 axle diesel trucks (MHDT)

2 axle diesel trucks (LHDT2)

(d) Onsite Truck Travel Speed: 10 mph

(e) Off-site Truck Travel Speed: 35 mph

(f) Idle speed: 0 mph

(g) Truck Idle time: 15 minutes per truck per day

2) Other Parameters

(a) Width of Truck Source: 8.5 feet

(b) Truck Operational Schedule 24 hours/day

(c) Height of Truck: 13.5 feet

(d) Release Height: 3.5 meters

19260 190th Street Warehouse		Emission:	DPM										
Processes Modeled		Build-out:	2027										
Onsite delivery traffic													
Truck idling													
Offsite delivery traffic													
Facilities in Operation													
Location	Truck type	Daily trucks											
Project Site	HHD1	109											
Project Site	MHDT	41											
Project Site	LHDT2	31											
Total		181											
Delivery Schedule:													
		24 hrs/day, 52 weeks/year											
Emission Factors 1 Year (2024)	Onsite Exhaust	Offsite Exhaust	Idle										
Vehicle Class	(g/mi)	(g/mi)	(g/hr)										
HHD1	0.00677	0.00435	0.00779										
MHDT	0.00614	0.00262	0.01578										
LHDT2	0.03275	0.01417	0.80311										
Onsite Roadway Links Modeled													
Link	Truck Type	Emission Factor (g/mi)	Trips per day (in and out)	Length (m)	Length (mi)	Daily Emissions Over the Link (g/day)	Emissions Over the Link (g/sec)	Emissions Over Link (lb/hr)	Daily Emissions (lbs/day)	Annual Avg Emissions Over Link (tons/yr)	Total Daily Emissions for all Vehicles (g/sec)		
Inbound from Project Driveway 4	HHD1	0.00677	109	451.1	0.28	2.07E-01	2.39E-06	1.64E+00	4.55E-04	8.31E-05			
Inbound from Project Driveway 4	MHDT	0.00614	41	451.1	0.28	7.06E-02	8.17E-07	5.59E-01	1.55E-04	2.84E-05	6.50E-06	100% of trucks	
Inbound from Project Driveway 4	LHDT2	0.03275	31	451.1	0.28	2.85E-01	3.29E-06	2.26E+00	6.27E-04	1.14E-04			
Truck Idling	Idle time	15 minutes											
Building/Location	Truck Type	Emission Factor (g/Idle-hour)	Idling Time (min)	Daily Trucks	Total Emissions (g/day)	Max Hourly Emissions (g/sec)	Max Hourly Emissions (lb/hr)	Total Daily Emissions (lbs/day)	Total Emissions (tons/yr)	Total Emissions (tons/yr)			
At proposed building	HHD1	0.00779	15	109	0.21	2.46E-06	1.95E-05	4.67E-04	8.53E-05				
At proposed building	MHDT	0.01578	15	41	0.16	1.87E-06	1.48E-05	3.56E-04	6.50E-05		7.64E-05		
At proposed building	LHDT2	0.80311	15	31	6.22	7.20E-05	5.71E-04	1.37E-02	2.50E-03		9.55E-06	per idling location (8 total)	

Offsite Roadway Links Modeled											
Link	Truck Type	Emission Factor (g/mi)	Round Trips per day	Length (m)	Length (mi)	Daily Emissions Over the Link (g/day)	Emissions Over the Link (g/sec)	Max Hourly Emissions Over Link (lb/hr)	Daily Emissions (lbs/day)	Annual Avg Emissions Over Link (tons/yr)	
Crenshaw Place n/o 190th St to Project Driveway 4	HHDT	0.00435	109	169.2	0.11	4.98E-02	5.77E-07	3.95E-01	1.10E-04	2.00E-05	100% of trucks
Crenshaw Place n/o 190th St to Project Driveway 4	MHDT	0.00262	41	169.2	0.11	1.13E-02	1.30E-07	8.94E-02	2.48E-05	4.53E-06	1.24E-06
Crenshaw Place n/o 190th St to Project Driveway 4	LHDT2	0.01417	31	169.2	0.11	4.62E-02	5.34E-07	3.66E-01	1.02E-04	1.86E-05	
Crenshaw Blvd n/o Crenshaw Pl	HHDT	0.00435	109	425.9	0.26	1.25E-01	1.45E-06	9.95E-01	2.76E-04	5.04E-05	45% of trucks
Crenshaw Blvd n/o Crenshaw Pl	MHDT	0.00262	41	425.9	0.26	2.84E-02	3.28E-07	2.25E-01	6.25E-05	1.14E-05	1.41E-06
Crenshaw Blvd n/o Crenshaw Pl	LHDT2	0.01417	31	425.9	0.26	1.16E-01	1.35E-06	9.22E-01	2.56E-04	4.67E-05	
190th St west of Crenshaw Pl	HHDT	0.00435	109	626.5	0.39	1.85E-01	2.14E-06	1.46E+00	4.06E-04	7.42E-05	35% of trucks
190th St west of Crenshaw Pl	MHDT	0.00262	41	626.5	0.39	4.17E-02	4.83E-07	3.31E-01	9.19E-05	1.68E-05	1.61E-06
190th St west of Crenshaw Pl	LHDT2	0.01417	31	626.5	0.39	1.71E-01	1.98E-06	1.36E+00	3.77E-04	6.87E-05	
190th St east of Crenshaw Pl	HHDT	0.00435	109	1480.1	0.92	4.36E-01	5.05E-06	3.46E+00	9.60E-04	1.75E-04	65% of trucks
190th St east of Crenshaw Pl	MHDT	0.00262	41	1480.1	0.92	9.86E-02	1.14E-06	7.82E-01	2.17E-04	3.96E-05	7.06E-06
190th St east of Crenshaw Pl	LHDT2	0.01417	31	1480.1	0.92	4.04E-01	4.67E-06	3.20E+00	8.90E-04	1.62E-04	

190th St Warehouse - Stationary Source Annual Average Emissions 2027

Estimate of Annual Stationary Source DPM Emissions (as PM10 exhaust)

Total Annual PM10 Exhaust Emissions as estimated in the CalEEMod model.	0.0081 tons/year for emergency pump/generator yard goat and forklifts 0.0081 tons/year
Average Emissions	0.000233219 grams/sec
Total size of the emission source from AERMOD	54590.2 meters squared
Average area source emission	4.27218E-09 grams/m2-sec

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/29/2025
** File: C:\Lakes\AERMOD View\19260 190th St Warehouse 2025\19260 190th St Warehouse 2025.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE 190th St Warehouse V3
  TITLETWO DPM concentrations for OY 2027
  MODELOPT DEFAULT CONC
  AVERTIME PERIOD
  URBANOPT 9663345 Los_Angeles_County_Population
  POLLUTID DPM
  RUNORNOT RUN
  ERRORFIL "19260 190th St Warehouse 2025.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION STCK1      POINT      377308.432  3747418.690      18.890
** DESCRSRC Idling location
  LOCATION STCK2      POINT      377365.592  3747400.910      19.190
** DESCRSRC Idling location
  LOCATION STCK3      POINT      377395.740  3747401.187      19.420
** DESCRSRC Idling location
  LOCATION STCK4      POINT      377422.900  3747400.341      19.530
** DESCRSRC Idling location
  LOCATION STCK5      POINT      377480.846  3747400.249      19.950
** DESCRSRC Idling location
  LOCATION STCK6      POINT      377509.512  3747400.407      20.380
** DESCRSRC Idling location
  LOCATION STCK7      POINT      377536.838  3747400.434      20.920
** DESCRSRC Idling location
  LOCATION STCK8      POINT      377606.959  3747253.919      19.240
** -----

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** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Crenshaw Place n/o 190th St to Project Driveway 4
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 1.24E-06
** Elevated
** Vertical Dimension = 7.00
** SZINIT = 1.63
** Nodes = 3
** 377297.362, 3747254.685, 17.80, 3.50, 4.00
** 377295.861, 3747414.324, 18.62, 3.50, 4.00
** 377304.563, 3747418.225, 18.78, 3.50, 4.00

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LOCATION L0002133    VOLUME  377297.321 3747258.980 17.88
LOCATION L0002134    VOLUME  377297.240 3747267.571 17.94
LOCATION L0002135    VOLUME  377297.160 3747276.161 17.99
LOCATION L0002136    VOLUME  377297.079 3747284.751 18.05
LOCATION L0002137    VOLUME  377296.998 3747293.342 18.12
LOCATION L0002138    VOLUME  377296.918 3747301.932 18.19
LOCATION L0002139    VOLUME  377296.837 3747310.523 18.26
LOCATION L0002140    VOLUME  377296.756 3747319.113 18.32
LOCATION L0002141    VOLUME  377296.675 3747327.703 18.35
LOCATION L0002142    VOLUME  377296.595 3747336.294 18.37
LOCATION L0002143    VOLUME  377296.514 3747344.884 18.40
LOCATION L0002144    VOLUME  377296.433 3747353.475 18.41
LOCATION L0002145    VOLUME  377296.352 3747362.065 18.43
LOCATION L0002146    VOLUME  377296.272 3747370.656 18.45
LOCATION L0002147    VOLUME  377296.191 3747379.246 18.46
LOCATION L0002148    VOLUME  377296.110 3747387.836 18.51
LOCATION L0002149    VOLUME  377296.029 3747396.427 18.55
LOCATION L0002150    VOLUME  377295.949 3747405.017 18.60
LOCATION L0002151    VOLUME  377295.868 3747413.608 18.69
LOCATION L0002152    VOLUME  377303.046 3747417.545 18.82

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** End of LINE VOLUME Source ID = SLINE1

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** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE2
** DESCRSRC Along Crenshaw Blvd
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 1.41E-06
** Elevated
** Vertical Dimension = 7.00
** SZINIT = 1.63
** Nodes = 7
** 377293.151, 3747832.482, 20.50, 3.50, 4.00
** 377294.893, 3747556.492, 19.22, 3.50, 4.00
** 377291.989, 3747510.878, 19.17, 3.50, 4.00
** 377280.190, 3747469.395, 18.61, 3.50, 4.00
** 377269.273, 3747444.981, 18.73, 3.50, 4.00
** 377264.724, 3747436.843, 18.71, 3.50, 4.00

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** 377284.436, 3747421.471, 18.61, 3.50, 4.00

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LOCATION	L0002153	VOLUME	377293.178	3747828.187	20.54
LOCATION	L0002154	VOLUME	377293.232	3747819.596	20.58
LOCATION	L0002155	VOLUME	377293.286	3747811.006	20.62
LOCATION	L0002156	VOLUME	377293.340	3747802.415	20.65
LOCATION	L0002157	VOLUME	377293.395	3747793.824	20.69
LOCATION	L0002158	VOLUME	377293.449	3747785.234	20.73
LOCATION	L0002159	VOLUME	377293.503	3747776.643	20.74
LOCATION	L0002160	VOLUME	377293.557	3747768.052	20.71
LOCATION	L0002161	VOLUME	377293.612	3747759.462	20.69
LOCATION	L0002162	VOLUME	377293.666	3747750.871	20.66
LOCATION	L0002163	VOLUME	377293.720	3747742.281	20.63
LOCATION	L0002164	VOLUME	377293.774	3747733.690	20.61
LOCATION	L0002165	VOLUME	377293.829	3747725.099	20.58
LOCATION	L0002166	VOLUME	377293.883	3747716.509	20.54
LOCATION	L0002167	VOLUME	377293.937	3747707.918	20.47
LOCATION	L0002168	VOLUME	377293.991	3747699.327	20.39
LOCATION	L0002169	VOLUME	377294.046	3747690.737	20.31
LOCATION	L0002170	VOLUME	377294.100	3747682.146	20.24
LOCATION	L0002171	VOLUME	377294.154	3747673.556	20.18
LOCATION	L0002172	VOLUME	377294.208	3747664.965	20.11
LOCATION	L0002173	VOLUME	377294.263	3747656.374	20.05
LOCATION	L0002174	VOLUME	377294.317	3747647.784	19.98
LOCATION	L0002175	VOLUME	377294.371	3747639.193	19.90
LOCATION	L0002176	VOLUME	377294.425	3747630.602	19.83
LOCATION	L0002177	VOLUME	377294.480	3747622.012	19.76
LOCATION	L0002178	VOLUME	377294.534	3747613.421	19.68
LOCATION	L0002179	VOLUME	377294.588	3747604.831	19.61
LOCATION	L0002180	VOLUME	377294.642	3747596.240	19.54
LOCATION	L0002181	VOLUME	377294.697	3747587.649	19.45
LOCATION	L0002182	VOLUME	377294.751	3747579.059	19.37
LOCATION	L0002183	VOLUME	377294.805	3747570.468	19.29
LOCATION	L0002184	VOLUME	377294.859	3747561.877	19.21
LOCATION	L0002185	VOLUME	377294.690	3747553.293	19.18
LOCATION	L0002186	VOLUME	377294.144	3747544.720	19.14
LOCATION	L0002187	VOLUME	377293.598	3747536.146	19.10
LOCATION	L0002188	VOLUME	377293.052	3747527.573	19.08
LOCATION	L0002189	VOLUME	377292.506	3747518.999	19.09
LOCATION	L0002190	VOLUME	377291.865	3747510.442	19.09
LOCATION	L0002191	VOLUME	377289.515	3747502.179	18.99
LOCATION	L0002192	VOLUME	377287.164	3747493.916	18.86
LOCATION	L0002193	VOLUME	377284.814	3747485.653	18.75
LOCATION	L0002194	VOLUME	377282.464	3747477.390	18.68
LOCATION	L0002195	VOLUME	377280.076	3747469.141	18.66
LOCATION	L0002196	VOLUME	377276.569	3747461.298	18.67
LOCATION	L0002197	VOLUME	377273.062	3747453.456	18.68
LOCATION	L0002198	VOLUME	377269.555	3747445.613	18.71
LOCATION	L0002199	VOLUME	377265.419	3747438.087	18.66
LOCATION	L0002200	VOLUME	377270.374	3747432.437	18.74
LOCATION	L0002201	VOLUME	377277.149	3747427.154	18.76
LOCATION	L0002202	VOLUME	377283.923	3747421.871	18.75

** End of LINE VOLUME Source ID = SLINE2

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** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE3
** DESCRSRC 190th St w/o Crenshaw Pl
** PREFIX
** Length of Side = 8.59
** Configuration = Adjacent
** Emission Rate = 1.61E-06
** Elevated
** Vertical Dimension = 7.00
** SZINIT = 1.63
** Nodes = 2
** 377295.985, 3747243.230, 17.83, 3.50, 4.00
** 376669.444, 3747243.719, 20.20, 3.50, 4.00
** -----
LOCATION L0002203    VOLUME 377291.689 3747243.233 17.83
LOCATION L0002204    VOLUME 377283.098 3747243.240 17.80
LOCATION L0002205    VOLUME 377274.508 3747243.247 17.79
LOCATION L0002206    VOLUME 377265.917 3747243.253 17.77
LOCATION L0002207    VOLUME 377257.326 3747243.260 17.73
LOCATION L0002208    VOLUME 377248.735 3747243.267 17.70
LOCATION L0002209    VOLUME 377240.145 3747243.274 17.66
LOCATION L0002210    VOLUME 377231.554 3747243.280 17.76
LOCATION L0002211    VOLUME 377222.963 3747243.287 17.87
LOCATION L0002212    VOLUME 377214.372 3747243.294 17.98
LOCATION L0002213    VOLUME 377205.781 3747243.300 17.98
LOCATION L0002214    VOLUME 377197.191 3747243.307 17.97
LOCATION L0002215    VOLUME 377188.600 3747243.314 17.95
LOCATION L0002216    VOLUME 377180.009 3747243.320 18.00
LOCATION L0002217    VOLUME 377171.418 3747243.327 18.04
LOCATION L0002218    VOLUME 377162.827 3747243.334 18.08
LOCATION L0002219    VOLUME 377154.237 3747243.341 18.18
LOCATION L0002220    VOLUME 377145.646 3747243.347 18.29
LOCATION L0002221    VOLUME 377137.055 3747243.354 18.39
LOCATION L0002222    VOLUME 377128.464 3747243.361 18.39
LOCATION L0002223    VOLUME 377119.873 3747243.367 18.40
LOCATION L0002224    VOLUME 377111.283 3747243.374 18.40
LOCATION L0002225    VOLUME 377102.692 3747243.381 18.43
LOCATION L0002226    VOLUME 377094.101 3747243.387 18.46
LOCATION L0002227    VOLUME 377085.510 3747243.394 18.49
LOCATION L0002228    VOLUME 377076.919 3747243.401 18.53
LOCATION L0002229    VOLUME 377068.329 3747243.408 18.58
LOCATION L0002230    VOLUME 377059.738 3747243.414 18.62
LOCATION L0002231    VOLUME 377051.147 3747243.421 18.66
LOCATION L0002232    VOLUME 377042.556 3747243.428 18.70
LOCATION L0002233    VOLUME 377033.965 3747243.434 18.74
LOCATION L0002234    VOLUME 377025.375 3747243.441 18.80
LOCATION L0002235    VOLUME 377016.784 3747243.448 18.87
LOCATION L0002236    VOLUME 377008.193 3747243.455 18.93
LOCATION L0002237    VOLUME 376999.602 3747243.461 18.87
LOCATION L0002238    VOLUME 376991.011 3747243.468 18.81
LOCATION L0002239    VOLUME 376982.421 3747243.475 18.75
LOCATION L0002240    VOLUME 376973.830 3747243.481 18.86
LOCATION L0002241    VOLUME 376965.239 3747243.488 18.97
LOCATION L0002242    VOLUME 376956.648 3747243.495 19.08

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LOCATION	L0002243	VOLUME	376948.057	3747243.501	19.08
LOCATION	L0002244	VOLUME	376939.467	3747243.508	19.07
LOCATION	L0002245	VOLUME	376930.876	3747243.515	19.07
LOCATION	L0002246	VOLUME	376922.285	3747243.522	19.10
LOCATION	L0002247	VOLUME	376913.694	3747243.528	19.13
LOCATION	L0002248	VOLUME	376905.103	3747243.535	19.16
LOCATION	L0002249	VOLUME	376896.513	3747243.542	19.22
LOCATION	L0002250	VOLUME	376887.922	3747243.548	19.29
LOCATION	L0002251	VOLUME	376879.331	3747243.555	19.35
LOCATION	L0002252	VOLUME	376870.740	3747243.562	19.35
LOCATION	L0002253	VOLUME	376862.149	3747243.568	19.36
LOCATION	L0002254	VOLUME	376853.559	3747243.575	19.37
LOCATION	L0002255	VOLUME	376844.968	3747243.582	19.38
LOCATION	L0002256	VOLUME	376836.377	3747243.589	19.40
LOCATION	L0002257	VOLUME	376827.786	3747243.595	19.41
LOCATION	L0002258	VOLUME	376819.195	3747243.602	19.45
LOCATION	L0002259	VOLUME	376810.605	3747243.609	19.48
LOCATION	L0002260	VOLUME	376802.014	3747243.615	19.51
LOCATION	L0002261	VOLUME	376793.423	3747243.622	19.50
LOCATION	L0002262	VOLUME	376784.832	3747243.629	19.49
LOCATION	L0002263	VOLUME	376776.241	3747243.635	19.48
LOCATION	L0002264	VOLUME	376767.651	3747243.642	19.55
LOCATION	L0002265	VOLUME	376759.060	3747243.649	19.62
LOCATION	L0002266	VOLUME	376750.469	3747243.656	19.68
LOCATION	L0002267	VOLUME	376741.878	3747243.662	19.70
LOCATION	L0002268	VOLUME	376733.287	3747243.669	19.71
LOCATION	L0002269	VOLUME	376724.697	3747243.676	19.73
LOCATION	L0002270	VOLUME	376716.106	3747243.682	19.79
LOCATION	L0002271	VOLUME	376707.515	3747243.689	19.85
LOCATION	L0002272	VOLUME	376698.924	3747243.696	19.92
LOCATION	L0002273	VOLUME	376690.333	3747243.702	19.98
LOCATION	L0002274	VOLUME	376681.743	3747243.709	20.04
LOCATION	L0002275	VOLUME	376673.152	3747243.716	20.11

** End of LINE VOLUME Source ID = SLINE3

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** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE4

** DESCRSRC 190th St East of Crenshaw Pl

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 7.06E-06

** Elevated

** Vertical Dimension = 7.00

** SZINIT = 1.63

** Nodes = 2

** 377296.267, 3747243.318, 17.84, 3.50, 4.00

** 378776.369, 3747244.103, 17.97, 3.50, 4.00

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LOCATION	L0002276	VOLUME	377300.562	3747243.320	17.93
LOCATION	L0002277	VOLUME	377309.153	3747243.324	18.04
LOCATION	L0002278	VOLUME	377317.744	3747243.329	18.14
LOCATION	L0002279	VOLUME	377326.334	3747243.334	18.24
LOCATION	L0002280	VOLUME	377334.925	3747243.338	18.34

LOCATION	L0002281	VOLUME	377343.516	3747243.343	18.43
LOCATION	L0002282	VOLUME	377352.107	3747243.347	18.53
LOCATION	L0002283	VOLUME	377360.698	3747243.352	18.62
LOCATION	L0002284	VOLUME	377369.288	3747243.356	18.71
LOCATION	L0002285	VOLUME	377377.879	3747243.361	18.77
LOCATION	L0002286	VOLUME	377386.470	3747243.366	18.82
LOCATION	L0002287	VOLUME	377395.061	3747243.370	18.89
LOCATION	L0002288	VOLUME	377403.652	3747243.375	19.03
LOCATION	L0002289	VOLUME	377412.242	3747243.379	19.17
LOCATION	L0002290	VOLUME	377420.833	3747243.384	19.30
LOCATION	L0002291	VOLUME	377429.424	3747243.388	19.39
LOCATION	L0002292	VOLUME	377438.015	3747243.393	19.48
LOCATION	L0002293	VOLUME	377446.606	3747243.397	19.57
LOCATION	L0002294	VOLUME	377455.196	3747243.402	19.66
LOCATION	L0002295	VOLUME	377463.787	3747243.407	19.74
LOCATION	L0002296	VOLUME	377472.378	3747243.411	19.80
LOCATION	L0002297	VOLUME	377480.969	3747243.416	19.79
LOCATION	L0002298	VOLUME	377489.560	3747243.420	19.78
LOCATION	L0002299	VOLUME	377498.150	3747243.425	19.76
LOCATION	L0002300	VOLUME	377506.741	3747243.429	19.71
LOCATION	L0002301	VOLUME	377515.332	3747243.434	19.66
LOCATION	L0002302	VOLUME	377523.923	3747243.438	19.62
LOCATION	L0002303	VOLUME	377532.514	3747243.443	19.58
LOCATION	L0002304	VOLUME	377541.104	3747243.448	19.54
LOCATION	L0002305	VOLUME	377549.695	3747243.452	19.51
LOCATION	L0002306	VOLUME	377558.286	3747243.457	19.49
LOCATION	L0002307	VOLUME	377566.877	3747243.461	19.46
LOCATION	L0002308	VOLUME	377575.468	3747243.466	19.42
LOCATION	L0002309	VOLUME	377584.058	3747243.470	19.35
LOCATION	L0002310	VOLUME	377592.649	3747243.475	19.28
LOCATION	L0002311	VOLUME	377601.240	3747243.480	19.22
LOCATION	L0002312	VOLUME	377609.831	3747243.484	19.19
LOCATION	L0002313	VOLUME	377618.422	3747243.489	19.16
LOCATION	L0002314	VOLUME	377627.012	3747243.493	19.12
LOCATION	L0002315	VOLUME	377635.603	3747243.498	19.08
LOCATION	L0002316	VOLUME	377644.194	3747243.502	19.03
LOCATION	L0002317	VOLUME	377652.785	3747243.507	18.98
LOCATION	L0002318	VOLUME	377661.376	3747243.511	18.92
LOCATION	L0002319	VOLUME	377669.966	3747243.516	18.86
LOCATION	L0002320	VOLUME	377678.557	3747243.521	18.80
LOCATION	L0002321	VOLUME	377687.148	3747243.525	18.77
LOCATION	L0002322	VOLUME	377695.739	3747243.530	18.74
LOCATION	L0002323	VOLUME	377704.330	3747243.534	18.70
LOCATION	L0002324	VOLUME	377712.920	3747243.539	18.64
LOCATION	L0002325	VOLUME	377721.511	3747243.543	18.58
LOCATION	L0002326	VOLUME	377730.102	3747243.548	18.52
LOCATION	L0002327	VOLUME	377738.693	3747243.552	18.47
LOCATION	L0002328	VOLUME	377747.284	3747243.557	18.42
LOCATION	L0002329	VOLUME	377755.874	3747243.562	18.36
LOCATION	L0002330	VOLUME	377764.465	3747243.566	18.30
LOCATION	L0002331	VOLUME	377773.056	3747243.571	18.23
LOCATION	L0002332	VOLUME	377781.647	3747243.575	18.18
LOCATION	L0002333	VOLUME	377790.238	3747243.580	18.19
LOCATION	L0002334	VOLUME	377798.828	3747243.584	18.20

LOCATION	L0002335	VOLUME	377807.419	3747243.589	18.22
LOCATION	L0002336	VOLUME	377816.010	3747243.593	18.23
LOCATION	L0002337	VOLUME	377824.601	3747243.598	18.25
LOCATION	L0002338	VOLUME	377833.192	3747243.603	18.26
LOCATION	L0002339	VOLUME	377841.782	3747243.607	18.26
LOCATION	L0002340	VOLUME	377850.373	3747243.612	18.26
LOCATION	L0002341	VOLUME	377858.964	3747243.616	18.28
LOCATION	L0002342	VOLUME	377867.555	3747243.621	18.34
LOCATION	L0002343	VOLUME	377876.146	3747243.625	18.39
LOCATION	L0002344	VOLUME	377884.736	3747243.630	18.45
LOCATION	L0002345	VOLUME	377893.327	3747243.635	18.51
LOCATION	L0002346	VOLUME	377901.918	3747243.639	18.57
LOCATION	L0002347	VOLUME	377910.509	3747243.644	18.63
LOCATION	L0002348	VOLUME	377919.100	3747243.648	18.68
LOCATION	L0002349	VOLUME	377927.690	3747243.653	18.74
LOCATION	L0002350	VOLUME	377936.281	3747243.657	18.82
LOCATION	L0002351	VOLUME	377944.872	3747243.662	18.94
LOCATION	L0002352	VOLUME	377953.463	3747243.666	19.07
LOCATION	L0002353	VOLUME	377962.054	3747243.671	19.15
LOCATION	L0002354	VOLUME	377970.644	3747243.676	19.14
LOCATION	L0002355	VOLUME	377979.235	3747243.680	19.12
LOCATION	L0002356	VOLUME	377987.826	3747243.685	19.13
LOCATION	L0002357	VOLUME	377996.417	3747243.689	19.16
LOCATION	L0002358	VOLUME	378005.007	3747243.694	19.20
LOCATION	L0002359	VOLUME	378013.598	3747243.698	19.24
LOCATION	L0002360	VOLUME	378022.189	3747243.703	19.29
LOCATION	L0002361	VOLUME	378030.780	3747243.707	19.34
LOCATION	L0002362	VOLUME	378039.371	3747243.712	19.41
LOCATION	L0002363	VOLUME	378047.961	3747243.717	19.51
LOCATION	L0002364	VOLUME	378056.552	3747243.721	19.62
LOCATION	L0002365	VOLUME	378065.143	3747243.726	19.70
LOCATION	L0002366	VOLUME	378073.734	3747243.730	19.71
LOCATION	L0002367	VOLUME	378082.325	3747243.735	19.72
LOCATION	L0002368	VOLUME	378090.915	3747243.739	19.75
LOCATION	L0002369	VOLUME	378099.506	3747243.744	19.80
LOCATION	L0002370	VOLUME	378108.097	3747243.749	19.86
LOCATION	L0002371	VOLUME	378116.688	3747243.753	19.89
LOCATION	L0002372	VOLUME	378125.279	3747243.758	19.89
LOCATION	L0002373	VOLUME	378133.869	3747243.762	19.89
LOCATION	L0002374	VOLUME	378142.460	3747243.767	19.89
LOCATION	L0002375	VOLUME	378151.051	3747243.771	19.89
LOCATION	L0002376	VOLUME	378159.642	3747243.776	19.88
LOCATION	L0002377	VOLUME	378168.233	3747243.780	19.84
LOCATION	L0002378	VOLUME	378176.823	3747243.785	19.76
LOCATION	L0002379	VOLUME	378185.414	3747243.790	19.68
LOCATION	L0002380	VOLUME	378194.005	3747243.794	19.64
LOCATION	L0002381	VOLUME	378202.596	3747243.799	19.66
LOCATION	L0002382	VOLUME	378211.187	3747243.803	19.69
LOCATION	L0002383	VOLUME	378219.777	3747243.808	19.70
LOCATION	L0002384	VOLUME	378228.368	3747243.812	19.68
LOCATION	L0002385	VOLUME	378236.959	3747243.817	19.67
LOCATION	L0002386	VOLUME	378245.550	3747243.821	19.61
LOCATION	L0002387	VOLUME	378254.141	3747243.826	19.50
LOCATION	L0002388	VOLUME	378262.731	3747243.831	19.39

LOCATION	L0002389	VOLUME	378271.322	3747243.835	19.34
LOCATION	L0002390	VOLUME	378279.913	3747243.840	19.38
LOCATION	L0002391	VOLUME	378288.504	3747243.844	19.42
LOCATION	L0002392	VOLUME	378297.095	3747243.849	19.44
LOCATION	L0002393	VOLUME	378305.685	3747243.853	19.44
LOCATION	L0002394	VOLUME	378314.276	3747243.858	19.43
LOCATION	L0002395	VOLUME	378322.867	3747243.862	19.40
LOCATION	L0002396	VOLUME	378331.458	3747243.867	19.34
LOCATION	L0002397	VOLUME	378340.049	3747243.872	19.29
LOCATION	L0002398	VOLUME	378348.639	3747243.876	19.25
LOCATION	L0002399	VOLUME	378357.230	3747243.881	19.24
LOCATION	L0002400	VOLUME	378365.821	3747243.885	19.22
LOCATION	L0002401	VOLUME	378374.412	3747243.890	19.21
LOCATION	L0002402	VOLUME	378383.003	3747243.894	19.21
LOCATION	L0002403	VOLUME	378391.593	3747243.899	19.20
LOCATION	L0002404	VOLUME	378400.184	3747243.904	19.16
LOCATION	L0002405	VOLUME	378408.775	3747243.908	19.09
LOCATION	L0002406	VOLUME	378417.366	3747243.913	19.01
LOCATION	L0002407	VOLUME	378425.957	3747243.917	19.01
LOCATION	L0002408	VOLUME	378434.547	3747243.922	19.10
LOCATION	L0002409	VOLUME	378443.138	3747243.926	19.18
LOCATION	L0002410	VOLUME	378451.729	3747243.931	19.21
LOCATION	L0002411	VOLUME	378460.320	3747243.935	19.20
LOCATION	L0002412	VOLUME	378468.911	3747243.940	19.19
LOCATION	L0002413	VOLUME	378477.501	3747243.945	19.16
LOCATION	L0002414	VOLUME	378486.092	3747243.949	19.09
LOCATION	L0002415	VOLUME	378494.683	3747243.954	19.02
LOCATION	L0002416	VOLUME	378503.274	3747243.958	18.96
LOCATION	L0002417	VOLUME	378511.865	3747243.963	18.92
LOCATION	L0002418	VOLUME	378520.455	3747243.967	18.89
LOCATION	L0002419	VOLUME	378529.046	3747243.972	18.85
LOCATION	L0002420	VOLUME	378537.637	3747243.976	18.82
LOCATION	L0002421	VOLUME	378546.228	3747243.981	18.78
LOCATION	L0002422	VOLUME	378554.819	3747243.986	18.74
LOCATION	L0002423	VOLUME	378563.409	3747243.990	18.68
LOCATION	L0002424	VOLUME	378572.000	3747243.995	18.62
LOCATION	L0002425	VOLUME	378580.591	3747243.999	18.61
LOCATION	L0002426	VOLUME	378589.182	3747244.004	18.64
LOCATION	L0002427	VOLUME	378597.773	3747244.008	18.68
LOCATION	L0002428	VOLUME	378606.363	3747244.013	18.70
LOCATION	L0002429	VOLUME	378614.954	3747244.018	18.71
LOCATION	L0002430	VOLUME	378623.545	3747244.022	18.71
LOCATION	L0002431	VOLUME	378632.136	3747244.027	18.68
LOCATION	L0002432	VOLUME	378640.727	3747244.031	18.62
LOCATION	L0002433	VOLUME	378649.317	3747244.036	18.55
LOCATION	L0002434	VOLUME	378657.908	3747244.040	18.49
LOCATION	L0002435	VOLUME	378666.499	3747244.045	18.42
LOCATION	L0002436	VOLUME	378675.090	3747244.049	18.36
LOCATION	L0002437	VOLUME	378683.681	3747244.054	18.34
LOCATION	L0002438	VOLUME	378692.271	3747244.059	18.35
LOCATION	L0002439	VOLUME	378700.862	3747244.063	18.37
LOCATION	L0002440	VOLUME	378709.453	3747244.068	18.37
LOCATION	L0002441	VOLUME	378718.044	3747244.072	18.36
LOCATION	L0002442	VOLUME	378726.635	3747244.077	18.35

LOCATION	L0002443	VOLUME	378735.225	3747244.081	18.31
LOCATION	L0002444	VOLUME	378743.816	3747244.086	18.25
LOCATION	L0002445	VOLUME	378752.407	3747244.090	18.19
LOCATION	L0002446	VOLUME	378760.998	3747244.095	18.14
LOCATION	L0002447	VOLUME	378769.589	3747244.100	18.11

** End of LINE VOLUME Source ID = SLINE4

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE5

** DESCRSRC Onsite truck travel

** PREFIX

** Length of Side = 8.59

** Configuration = Adjacent

** Emission Rate = 6.5E-06

** Elevated

** Building Height = 10.97

** SZINIT = 5.10

** Nodes = 19

** 377311.877, 3747420.629, 18.85, 3.50, 4.00

** 377316.919, 3747421.852, 18.95, 3.50, 4.00

** 377326.238, 3747423.379, 18.99, 3.50, 4.00

** 377340.141, 3747425.671, 19.10, 3.50, 4.00

** 377578.624, 3747425.824, 20.32, 3.50, 4.00

** 377584.888, 3747425.060, 20.45, 3.50, 4.00

** 377587.943, 3747422.463, 20.62, 3.50, 4.00

** 377589.930, 3747420.629, 20.71, 3.50, 4.00

** 377590.999, 3747413.449, 20.96, 3.50, 4.00

** 377591.152, 3747396.949, 20.74, 3.50, 4.00

** 377591.916, 3747330.339, 20.30, 3.50, 4.00

** 377592.068, 3747325.908, 19.65, 3.50, 4.00

** 377593.443, 3747323.006, 19.63, 3.50, 4.00

** 377597.721, 3747320.561, 19.59, 3.50, 4.00

** 377600.777, 3747318.575, 19.58, 3.50, 4.00

** 377602.916, 3747315.978, 19.57, 3.50, 4.00

** 377604.902, 3747311.395, 19.58, 3.50, 4.00

** 377606.124, 3747304.214, 19.62, 3.50, 4.00

** 377607.040, 3747255.631, 19.26, 3.50, 4.00

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LOCATION	L0002080	VOLUME	377316.052	3747421.641	18.99
LOCATION	L0002081	VOLUME	377324.516	3747423.097	19.04
LOCATION	L0002082	VOLUME	377332.993	3747424.493	19.08
LOCATION	L0002083	VOLUME	377341.487	3747425.672	19.11
LOCATION	L0002084	VOLUME	377350.078	3747425.677	19.16
LOCATION	L0002085	VOLUME	377358.668	3747425.683	19.24
LOCATION	L0002086	VOLUME	377367.259	3747425.688	19.32
LOCATION	L0002087	VOLUME	377375.850	3747425.694	19.38
LOCATION	L0002088	VOLUME	377384.441	3747425.699	19.44
LOCATION	L0002089	VOLUME	377393.032	3747425.705	19.49
LOCATION	L0002090	VOLUME	377401.622	3747425.710	19.55
LOCATION	L0002091	VOLUME	377410.213	3747425.716	19.61
LOCATION	L0002092	VOLUME	377418.804	3747425.721	19.67
LOCATION	L0002093	VOLUME	377427.395	3747425.727	19.73
LOCATION	L0002094	VOLUME	377435.986	3747425.732	19.80
LOCATION	L0002095	VOLUME	377444.576	3747425.738	19.86

LOCATION	L0002096	VOLUME	377453.167	3747425.743	19.91
LOCATION	L0002097	VOLUME	377461.758	3747425.749	19.96
LOCATION	L0002098	VOLUME	377470.349	3747425.754	20.01
LOCATION	L0002099	VOLUME	377478.940	3747425.760	20.07
LOCATION	L0002100	VOLUME	377487.530	3747425.765	20.13
LOCATION	L0002101	VOLUME	377496.121	3747425.771	20.19
LOCATION	L0002102	VOLUME	377504.712	3747425.776	20.20
LOCATION	L0002103	VOLUME	377513.303	3747425.782	20.19
LOCATION	L0002104	VOLUME	377521.894	3747425.787	20.18
LOCATION	L0002105	VOLUME	377530.484	3747425.793	20.26
LOCATION	L0002106	VOLUME	377539.075	3747425.799	20.37
LOCATION	L0002107	VOLUME	377547.666	3747425.804	20.48
LOCATION	L0002108	VOLUME	377556.257	3747425.810	20.49
LOCATION	L0002109	VOLUME	377564.848	3747425.815	20.45
LOCATION	L0002110	VOLUME	377573.438	3747425.821	20.42
LOCATION	L0002111	VOLUME	377582.004	3747425.412	20.36
LOCATION	L0002112	VOLUME	377589.175	3747421.326	20.41
LOCATION	L0002113	VOLUME	377591.002	3747413.145	20.64
LOCATION	L0002114	VOLUME	377591.081	3747404.555	20.87
LOCATION	L0002115	VOLUME	377591.163	3747395.964	20.78
LOCATION	L0002116	VOLUME	377591.262	3747387.374	20.70
LOCATION	L0002117	VOLUME	377591.360	3747378.784	20.61
LOCATION	L0002118	VOLUME	377591.459	3747370.194	20.55
LOCATION	L0002119	VOLUME	377591.557	3747361.603	20.50
LOCATION	L0002120	VOLUME	377591.656	3747353.013	20.44
LOCATION	L0002121	VOLUME	377591.754	3747344.423	20.37
LOCATION	L0002122	VOLUME	377591.853	3747335.833	20.17
LOCATION	L0002123	VOLUME	377592.022	3747327.244	19.96
LOCATION	L0002124	VOLUME	377596.953	3747321.000	19.72
LOCATION	L0002125	VOLUME	377603.193	3747315.338	19.59
LOCATION	L0002126	VOLUME	377605.622	3747307.162	19.61
LOCATION	L0002127	VOLUME	377606.229	3747298.615	19.67
LOCATION	L0002128	VOLUME	377606.392	3747290.026	19.72
LOCATION	L0002129	VOLUME	377606.554	3747281.436	19.75
LOCATION	L0002130	VOLUME	377606.716	3747272.847	19.59
LOCATION	L0002131	VOLUME	377606.878	3747264.258	19.43
LOCATION	L0002132	VOLUME	377607.040	3747255.669	19.27
** End of LINE VOLUME Source ID = SLINE5					
LOCATION	PAREA1	AREAPOLY	377306.050	3747440.144	19.120
** DESCRSRC Onsite stationary and offroad DPM sources					
** Source Parameters **					
SRCPARAM	STCK1	9.55E-06	3.500	366.000	51.9 0.09144
SRCPARAM	STCK2	9.55E-06	3.500	366.000	51.9 0.09144
SRCPARAM	STCK3	9.55E-06	3.500	366.000	51.9 0.09144
SRCPARAM	STCK4	9.55E-06	3.500	366.000	51.9 0.09144
SRCPARAM	STCK5	9.55E-06	3.500	366.000	51.9 0.09144
SRCPARAM	STCK6	9.55E-06	3.500	366.000	51.9 0.09144
SRCPARAM	STCK7	9.55E-06	3.500	366.000	51.9 0.09144
SRCPARAM	STCK8	9.55E-06	3.500	366.000	51.9 0.09144
** LINE VOLUME Source ID = SLINE1					
SRCPARAM	L0002133	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002134	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002135	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002136	0.000000062	3.50	4.00	1.63

SRCPARAM	L0002137	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002138	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002139	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002140	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002141	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002142	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002143	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002144	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002145	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002146	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002147	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002148	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002149	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002150	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002151	0.000000062	3.50	4.00	1.63
SRCPARAM	L0002152	0.000000062	3.50	4.00	1.63

**

** LINE VOLUME Source ID = SLINE2

SRCPARAM	L0002153	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002154	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002155	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002156	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002157	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002158	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002159	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002160	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002161	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002162	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002163	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002164	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002165	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002166	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002167	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002168	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002169	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002170	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002171	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002172	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002173	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002174	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002175	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002176	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002177	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002178	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002179	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002180	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002181	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002182	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002183	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002184	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002185	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002186	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002187	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002188	0.0000000282	3.50	4.00	1.63

SRCPARAM	L0002189	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002190	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002191	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002192	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002193	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002194	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002195	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002196	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002197	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002198	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002199	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002200	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002201	0.0000000282	3.50	4.00	1.63
SRCPARAM	L0002202	0.0000000282	3.50	4.00	1.63

**

** LINE VOLUME Source ID = SLINE3

SRCPARAM	L0002203	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002204	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002205	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002206	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002207	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002208	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002209	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002210	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002211	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002212	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002213	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002214	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002215	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002216	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002217	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002218	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002219	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002220	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002221	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002222	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002223	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002224	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002225	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002226	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002227	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002228	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002229	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002230	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002231	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002232	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002233	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002234	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002235	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002236	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002237	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002238	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002239	0.00000002205	3.50	4.00	1.63
SRCPARAM	L0002240	0.00000002205	3.50	4.00	1.63

[illegible]

[illegible]

SRCPARAM	L0002401	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002402	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002403	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002404	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002405	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002406	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002407	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002408	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002409	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002410	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002411	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002412	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002413	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002414	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002415	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002416	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002417	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002418	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002419	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002420	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002421	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002422	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002423	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002424	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002425	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002426	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002427	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002428	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002429	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002430	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002431	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002432	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002433	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002434	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002435	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002436	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002437	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002438	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002439	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002440	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002441	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002442	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002443	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002444	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002445	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002446	0.00000004105	3.50	4.00	1.63
SRCPARAM	L0002447	0.00000004105	3.50	4.00	1.63

**

** LINE VOLUME Source ID = SLINES

SRCPARAM	L0002080	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002081	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002082	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002083	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002084	0.0000001226	3.50	4.00	5.10

SRCPARAM	L0002085	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002086	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002087	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002088	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002089	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002090	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002091	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002092	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002093	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002094	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002095	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002096	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002097	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002098	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002099	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002100	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002101	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002102	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002103	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002104	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002105	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002106	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002107	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002108	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002109	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002110	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002111	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002112	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002113	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002114	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002115	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002116	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002117	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002118	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002119	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002120	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002121	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002122	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002123	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002124	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002125	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002126	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002127	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002128	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002129	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002130	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002131	0.0000001226	3.50	4.00	5.10
SRCPARAM	L0002132	0.0000001226	3.50	4.00	5.10

**

SRCPARAM	PAREA1	4.2722E-09	1.829	6	
AREAVERT	PAREA1	377306.050	3747440.144	377306.343	3747250.475
AREAVERT	PAREA1	377599.042	3747250.183	377598.456	3747431.070
AREAVERT	PAREA1	377499.231	3747430.485	377497.475	3747440.144

[illegible]

[illegible]

BUILDWID	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
BUILDWID	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
BUILDWID	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
BUILDWID	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
BUILDLN	STCK1	0.00	0.00	0.00	0.00	0.00	0.00
BUILDLN	STCK1	0.00	0.00	248.24	0.00	0.00	0.00
BUILDLN	STCK1	0.00	0.00	0.00	0.00	0.00	0.00
BUILDLN	STCK1	0.00	0.00	0.00	0.00	0.00	0.00
BUILDLN	STCK1	0.00	0.00	248.24	254.97	259.25	255.65
BUILDLN	STCK1	244.28	225.49	199.85	168.14	131.31	0.00
BUILDLN	STCK2	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK2	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK2	244.28	225.49	199.85	168.14	131.31	115.45
BUILDLN	STCK2	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK2	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK2	244.28	225.49	199.85	168.14	131.31	115.45
BUILDLN	STCK3	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK3	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK3	244.28	225.49	199.85	168.14	131.31	115.45
BUILDLN	STCK3	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK3	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK3	244.28	225.49	199.85	168.14	131.31	115.45
BUILDLN	STCK4	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK4	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK4	244.28	225.49	199.85	168.14	131.31	115.45
BUILDLN	STCK4	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK4	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK4	244.28	225.49	199.85	168.14	131.31	115.45
BUILDLN	STCK5	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK5	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK5	244.28	225.49	199.85	168.14	131.31	115.45
BUILDLN	STCK5	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK5	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK5	244.28	225.49	199.85	168.14	131.31	115.45
BUILDLN	STCK6	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK6	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK6	244.28	225.49	199.85	168.14	131.31	115.45
BUILDLN	STCK6	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK6	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK6	244.28	225.49	199.85	168.14	131.31	115.45
BUILDLN	STCK7	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK7	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK7	244.28	225.49	199.85	168.14	131.31	115.45
BUILDLN	STCK7	156.30	192.62	223.08	246.76	262.94	271.14
BUILDLN	STCK7	271.10	262.82	248.24	254.97	259.25	255.65
BUILDLN	STCK7	244.28	225.49	199.85	168.14	131.31	115.45

BUILDLN	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
BUILDLN	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
BUILDLN	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
BUILDLN	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
BUILDLN	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
BUILDLN	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
XBADJ	STCK1	0.00	0.00	0.00	0.00	0.00	0.00
XBADJ	STCK1	0.00	0.00	20.31	0.00	0.00	0.00
XBADJ	STCK1	0.00	0.00	0.00	0.00	0.00	0.00
XBADJ	STCK1	0.00	0.00	0.00	0.00	0.00	0.00
XBADJ	STCK1	0.00	0.00	-268.55	-279.79	-287.82	-287.10
XBADJ	STCK1	-277.66	-259.78	-234.01	-201.13	-162.14	0.00
XBADJ	STCK2	-105.79	-107.29	-105.53	-100.57	-92.55	-81.72
XBADJ	STCK2	-68.41	-53.01	-36.85	-34.56	-31.23	-26.94
XBADJ	STCK2	-21.84	-16.07	-9.82	-3.26	3.39	-14.38
XBADJ	STCK2	-50.51	-85.32	-117.54	-146.19	-170.39	-189.42
XBADJ	STCK2	-202.69	-209.80	-211.39	-220.41	-228.02	-228.71
XBADJ	STCK2	-222.44	-209.42	-190.03	-164.87	-134.70	-101.07
XBADJ	STCK3	-111.30	-117.87	-120.85	-120.17	-115.83	-107.97
XBADJ	STCK3	-96.83	-82.75	-67.00	-64.21	-59.46	-52.91
XBADJ	STCK3	-44.76	-35.24	-24.65	-13.31	-1.57	-14.10
XBADJ	STCK3	-45.00	-74.75	-102.22	-126.59	-147.12	-163.17
XBADJ	STCK3	-174.26	-180.06	-181.24	-190.77	-199.79	-202.74
XBADJ	STCK3	-199.53	-190.25	-175.20	-154.82	-129.74	-101.35
XBADJ	STCK4	-115.18	-126.36	-133.70	-136.97	-136.09	-131.07
XBADJ	STCK4	-122.07	-109.35	-94.16	-91.10	-85.28	-76.86
XBADJ	STCK4	-66.11	-53.35	-38.97	-23.40	-7.12	-14.95
XBADJ	STCK4	-41.12	-66.26	-89.38	-109.79	-126.86	-140.07
XBADJ	STCK4	-149.03	-153.46	-154.08	-163.87	-173.97	-178.79
XBADJ	STCK4	-178.17	-172.15	-160.88	-144.74	-124.19	-100.50
XBADJ	STCK5	-125.15	-146.09	-162.59	-174.15	-180.42	-181.21
XBADJ	STCK5	-176.49	-166.41	-152.11	-148.19	-139.76	-127.09
XBADJ	STCK5	-110.56	-90.67	-68.02	-43.30	-17.27	-15.04
XBADJ	STCK5	-31.15	-46.52	-60.48	-72.61	-82.52	-89.93
XBADJ	STCK5	-94.61	-96.41	-96.13	-106.79	-119.49	-128.56
XBADJ	STCK5	-133.72	-134.83	-131.83	-124.83	-114.04	-100.41
XBADJ	STCK6	-130.29	-156.04	-177.06	-192.70	-202.48	-206.11
XBADJ	STCK6	-203.48	-194.66	-180.77	-176.38	-166.64	-151.83
XBADJ	STCK6	-132.41	-108.97	-82.21	-52.96	-22.09	-14.88
XBADJ	STCK6	-26.02	-36.57	-46.01	-54.06	-60.46	-65.03
XBADJ	STCK6	-67.62	-68.16	-67.47	-78.59	-92.61	-103.82
XBADJ	STCK6	-111.87	-116.53	-117.64	-115.18	-109.22	-100.57
XBADJ	STCK7	-135.05	-165.41	-190.74	-210.28	-223.43	-229.79
XBADJ	STCK7	-229.16	-221.58	-208.10	-203.30	-192.31	-175.49
XBADJ	STCK7	-153.33	-126.52	-95.86	-62.28	-26.82	-14.86
XBADJ	STCK7	-21.25	-27.20	-32.33	-36.48	-39.51	-41.35
XBADJ	STCK7	-41.93	-41.24	-40.14	-51.68	-66.94	-80.16

XBADJ	STCK7	-90.95	-98.97	-103.99	-105.85	-104.49	-100.59
XBADJ	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
XBADJ	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
XBADJ	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
XBADJ	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
XBADJ	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
YBADJ	STCK1	0.00	0.00	0.00	0.00	0.00	0.00
YBADJ	STCK1	0.00	0.00	-61.12	0.00	0.00	0.00
YBADJ	STCK1	0.00	0.00	0.00	0.00	0.00	0.00
YBADJ	STCK1	0.00	0.00	0.00	0.00	0.00	0.00
YBADJ	STCK1	0.00	0.00	61.12	35.22	8.14	-19.19
YBADJ	STCK1	-45.93	-71.28	-94.46	-114.77	-131.60	0.00
YBADJ	STCK2	-92.92	-98.40	-100.88	-100.30	-96.67	-90.11
YBADJ	STCK2	-80.81	-69.05	-43.34	-27.64	-10.98	6.00
YBADJ	STCK2	22.81	38.92	53.85	67.14	78.39	87.27
YBADJ	STCK2	92.92	98.40	100.88	100.30	96.67	90.11
YBADJ	STCK2	80.81	69.05	43.34	27.64	10.98	-6.00
YBADJ	STCK2	-22.81	-38.92	-53.85	-67.14	-78.39	-87.27
YBADJ	STCK3	-63.28	-70.16	-74.91	-77.39	-77.51	-75.28
YBADJ	STCK3	-70.76	-64.09	-43.62	-33.15	-21.56	-9.31
YBADJ	STCK3	3.21	15.64	27.60	38.71	48.65	57.12
YBADJ	STCK3	63.28	70.16	74.91	77.39	77.51	75.28
YBADJ	STCK3	70.76	64.09	43.62	33.15	21.56	9.31
YBADJ	STCK3	-3.21	-15.64	-27.60	-38.71	-48.65	-57.12
YBADJ	STCK4	-36.38	-44.35	-50.97	-56.03	-59.40	-60.96
YBADJ	STCK4	-60.67	-58.53	-42.77	-37.03	-30.05	-22.16
YBADJ	STCK4	-13.59	-4.62	4.50	13.48	22.05	29.96
YBADJ	STCK4	36.38	44.35	50.97	56.03	59.40	60.96
YBADJ	STCK4	60.67	58.53	42.77	37.03	30.05	22.16
YBADJ	STCK4	13.59	4.62	-4.50	-13.48	-22.05	-29.96
YBADJ	STCK5	20.70	10.14	-0.73	-11.58	-22.08	-31.91
YBADJ	STCK5	-40.76	-48.38	-42.69	-47.00	-49.78	-51.05
YBADJ	STCK5	-50.77	-48.95	-45.64	-40.94	-35.00	-27.99
YBADJ	STCK5	-20.70	-10.14	0.73	11.58	22.08	31.91
YBADJ	STCK5	40.76	48.38	42.69	47.00	49.78	51.05
YBADJ	STCK5	50.77	48.95	45.64	40.94	35.00	27.99
YBADJ	STCK6	48.90	37.01	24.01	10.27	-3.78	-17.72
YBADJ	STCK6	-31.11	-43.56	-42.85	-52.14	-59.74	-65.52
YBADJ	STCK6	-69.32	-71.01	-70.54	-67.93	-63.25	-56.65
YBADJ	STCK6	-48.90	-37.01	-24.01	-10.27	3.78	17.72
YBADJ	STCK6	31.11	43.56	42.85	52.14	59.74	65.52
YBADJ	STCK6	69.32	71.01	70.54	67.93	63.25	56.65
YBADJ	STCK7	75.81	62.69	47.66	31.19	13.77	-4.07
YBADJ	STCK7	-21.78	-38.84	-42.87	-56.90	-69.10	-79.21
YBADJ	STCK7	-86.90	-91.96	-94.22	-93.62	-90.17	-83.98

YBADJ	STCK7	-75.81	-62.69	-47.66	-31.19	-13.77	4.07
YBADJ	STCK7	21.78	38.84	42.87	56.90	69.10	79.21
YBADJ	STCK7	86.90	91.96	94.22	93.62	90.17	83.98

YBADJ	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
YBADJ	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
YBADJ	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
YBADJ	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
YBADJ	STCK8	0.00	0.00	0.00	0.00	0.00	0.00
YBADJ	STCK8	0.00	0.00	0.00	0.00	0.00	0.00

URBANSRC ALL
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED "19260 190th St Warehouse 2025.rou"

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE "E:\New MET data\khhr_sfc_pfl\KHR_V11_trimmed.sfc"

PROFFILE "E:\New MET data\khhr_sfc_pfl\KHR_V11_trimmed.pfl"

SURFDATA 3167 2016

UAIRDATA 3190 2016

PROFBASE 19.17 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

** Auto-Generated Plotfiles

PLOTFILE PERIOD ALL "19260 190TH ST WAREHOUSE 2025.AD\PE00GALL.PLT" 31

SUMMFILE "19260 190th St Warehouse 2025.sum"

OU FINISHED

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)

A Total of 10 Warning Message(s)
A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****

SO W320	527	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	528	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	529	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	530	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	531	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	532	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	533	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	534	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
ME W186	1223	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	1223	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	

*** SETUP Finishes Successfully ***

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
*** 08:41:54
*** PAGE 1

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY ***

** Model Options Selected:

- * Model Uses Regulatory DEFAULT Options
- * Model Is Setup For Calculation of Average CONCentration Values.
- * NO GAS DEPOSITION Data Provided.
- * NO PARTICLE DEPOSITION Data Provided.
- * Model Uses NO DRY DEPLETION. DDPLETE = F
- * Model Uses NO WET DEPLETION. WETDPLT = F
- * Stack-tip Downwash.
- * Model Accounts for ELEVated Terrain Effects.
- * Use Calms Processing Routine.
- * Use Missing Data Processing Routine.
- * No Exponential Decay.
- * Model Uses URBAN Dispersion Algorithm for the SBL for 377 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 9663345.0 ; Urban Roughness Length = 1.000 m
- * Urban Roughness Length of 1.0 Meter Used.
- * ADJ_U* - Use ADJ_U* option for SBL in AERMET
- * CCVR_Sub - Meteorological data includes CCVR substitutions
- * TEMP_Sub - Meteorological data includes TEMP substitutions
- * Model Assumes No FLAGPOLE Receptor Heights.
- * The User Specified a Pollutant Type of: DPM

**Model Calculates PERIOD Averages Only

**This Run Includes: 377 Source(s); 1 Source Group(s); and 449 Receptor(s)

with: 8 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 368 VOLUME source(s)
and: 1 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)
and: 0 SWPOINT source(s)

**Model Set To Continue RUNNING After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 22112

**Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 19.17 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 4.3 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: 19260 190th St Warehouse 2025.err

**File for Summary of Results: 19260 190th St Warehouse 2025.sum

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

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*** MODELOPTS: RegDFAULT CONC ELEV URBAN ADJ_U*

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR	EMIS RATE SCALAR VARY BY
STCK1	0	0.95500E-05	377308.4	3747418.7	18.9	3.50	366.00	51.90	0.09	YES	YES	NO	
STCK2	0	0.95500E-05	377365.6	3747400.9	19.2	3.50	366.00	51.90	0.09	YES	YES	NO	

STCK3	0	0.95500E-05	377395.7	3747401.2	19.4	3.50	366.00	51.90	0.09	YES	YES	NO
STCK4	0	0.95500E-05	377422.9	3747400.3	19.5	3.50	366.00	51.90	0.09	YES	YES	NO
STCK5	0	0.95500E-05	377480.8	3747400.2	19.9	3.50	366.00	51.90	0.09	YES	YES	NO
STCK6	0	0.95500E-05	377509.5	3747400.4	20.4	3.50	366.00	51.90	0.09	YES	YES	NO
STCK7	0	0.95500E-05	377536.8	3747400.4	20.9	3.50	366.00	51.90	0.09	YES	YES	NO
STCK8	0	0.95500E-05	377607.0	3747253.9	19.2	3.50	366.00	51.90	0.09	NO	YES	NO

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0002133	0	0.62000E-07	377297.3	3747259.0	17.9	3.50	4.00	1.63	YES		NO
L0002134	0	0.62000E-07	377297.2	3747267.6	17.9	3.50	4.00	1.63	YES		NO
L0002135	0	0.62000E-07	377297.2	3747276.2	18.0	3.50	4.00	1.63	YES		NO
L0002136	0	0.62000E-07	377297.1	3747284.8	18.1	3.50	4.00	1.63	YES		NO
L0002137	0	0.62000E-07	377297.0	3747293.3	18.1	3.50	4.00	1.63	YES		NO
L0002138	0	0.62000E-07	377296.9	3747301.9	18.2	3.50	4.00	1.63	YES		NO
L0002139	0	0.62000E-07	377296.8	3747310.5	18.3	3.50	4.00	1.63	YES		NO
L0002140	0	0.62000E-07	377296.8	3747319.1	18.3	3.50	4.00	1.63	YES		NO
L0002141	0	0.62000E-07	377296.7	3747327.7	18.4	3.50	4.00	1.63	YES		NO
L0002142	0	0.62000E-07	377296.6	3747336.3	18.4	3.50	4.00	1.63	YES		NO
L0002143	0	0.62000E-07	377296.5	3747344.9	18.4	3.50	4.00	1.63	YES		NO
L0002144	0	0.62000E-07	377296.4	3747353.5	18.4	3.50	4.00	1.63	YES		NO
L0002145	0	0.62000E-07	377296.4	3747362.1	18.4	3.50	4.00	1.63	YES		NO
L0002146	0	0.62000E-07	377296.3	3747370.7	18.4	3.50	4.00	1.63	YES		NO
L0002147	0	0.62000E-07	377296.2	3747379.2	18.5	3.50	4.00	1.63	YES		NO
L0002148	0	0.62000E-07	377296.1	3747387.8	18.5	3.50	4.00	1.63	YES		NO
L0002149	0	0.62000E-07	377296.0	3747396.4	18.6	3.50	4.00	1.63	YES		NO
L0002150	0	0.62000E-07	377295.9	3747405.0	18.6	3.50	4.00	1.63	YES		NO
L0002151	0	0.62000E-07	377295.9	3747413.6	18.7	3.50	4.00	1.63	YES		NO
L0002152	0	0.62000E-07	377303.0	3747417.5	18.8	3.50	4.00	1.63	YES		NO
L0002153	0	0.28200E-07	377293.2	3747828.2	20.5	3.50	4.00	1.63	YES		NO
L0002154	0	0.28200E-07	377293.2	3747819.6	20.6	3.50	4.00	1.63	YES		NO
L0002155	0	0.28200E-07	377293.3	3747811.0	20.6	3.50	4.00	1.63	YES		NO
L0002156	0	0.28200E-07	377293.3	3747802.4	20.7	3.50	4.00	1.63	YES		NO
L0002157	0	0.28200E-07	377293.4	3747793.8	20.7	3.50	4.00	1.63	YES		NO
L0002158	0	0.28200E-07	377293.4	3747785.2	20.7	3.50	4.00	1.63	YES		NO
L0002159	0	0.28200E-07	377293.5	3747776.6	20.7	3.50	4.00	1.63	YES		NO
L0002160	0	0.28200E-07	377293.6	3747768.1	20.7	3.50	4.00	1.63	YES		NO
L0002161	0	0.28200E-07	377293.6	3747759.5	20.7	3.50	4.00	1.63	YES		NO
L0002162	0	0.28200E-07	377293.7	3747750.9	20.7	3.50	4.00	1.63	YES		NO
L0002163	0	0.28200E-07	377293.7	3747742.3	20.6	3.50	4.00	1.63	YES		NO
L0002164	0	0.28200E-07	377293.8	3747733.7	20.6	3.50	4.00	1.63	YES		NO
L0002165	0	0.28200E-07	377293.8	3747725.1	20.6	3.50	4.00	1.63	YES		NO
L0002166	0	0.28200E-07	377293.9	3747716.5	20.5	3.50	4.00	1.63	YES		NO
L0002167	0	0.28200E-07	377293.9	3747707.9	20.5	3.50	4.00	1.63	YES		NO

L0002168	0	0.28200E-07	377294.0	3747699.3	20.4	3.50	4.00	1.63	YES	NO
L0002169	0	0.28200E-07	377294.0	3747690.7	20.3	3.50	4.00	1.63	YES	NO
L0002170	0	0.28200E-07	377294.1	3747682.1	20.2	3.50	4.00	1.63	YES	NO
L0002171	0	0.28200E-07	377294.2	3747673.6	20.2	3.50	4.00	1.63	YES	NO
L0002172	0	0.28200E-07	377294.2	3747665.0	20.1	3.50	4.00	1.63	YES	NO

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0002173	0	0.28200E-07	377294.3	3747656.4	20.1	3.50	4.00	1.63	YES		NO
L0002174	0	0.28200E-07	377294.3	3747647.8	20.0	3.50	4.00	1.63	YES		NO
L0002175	0	0.28200E-07	377294.4	3747639.2	19.9	3.50	4.00	1.63	YES		NO
L0002176	0	0.28200E-07	377294.4	3747630.6	19.8	3.50	4.00	1.63	YES		NO
L0002177	0	0.28200E-07	377294.5	3747622.0	19.8	3.50	4.00	1.63	YES		NO
L0002178	0	0.28200E-07	377294.5	3747613.4	19.7	3.50	4.00	1.63	YES		NO
L0002179	0	0.28200E-07	377294.6	3747604.8	19.6	3.50	4.00	1.63	YES		NO
L0002180	0	0.28200E-07	377294.6	3747596.2	19.5	3.50	4.00	1.63	YES		NO
L0002181	0	0.28200E-07	377294.7	3747587.6	19.4	3.50	4.00	1.63	YES		NO
L0002182	0	0.28200E-07	377294.8	3747579.1	19.4	3.50	4.00	1.63	YES		NO
L0002183	0	0.28200E-07	377294.8	3747570.5	19.3	3.50	4.00	1.63	YES		NO
L0002184	0	0.28200E-07	377294.9	3747561.9	19.2	3.50	4.00	1.63	YES		NO
L0002185	0	0.28200E-07	377294.7	3747553.3	19.2	3.50	4.00	1.63	YES		NO
L0002186	0	0.28200E-07	377294.1	3747544.7	19.1	3.50	4.00	1.63	YES		NO
L0002187	0	0.28200E-07	377293.6	3747536.1	19.1	3.50	4.00	1.63	YES		NO
L0002188	0	0.28200E-07	377293.1	3747527.6	19.1	3.50	4.00	1.63	YES		NO
L0002189	0	0.28200E-07	377292.5	3747519.0	19.1	3.50	4.00	1.63	YES		NO
L0002190	0	0.28200E-07	377291.9	3747510.4	19.1	3.50	4.00	1.63	YES		NO
L0002191	0	0.28200E-07	377289.5	3747502.2	19.0	3.50	4.00	1.63	YES		NO
L0002192	0	0.28200E-07	377287.2	3747493.9	18.9	3.50	4.00	1.63	YES		NO
L0002193	0	0.28200E-07	377284.8	3747485.7	18.8	3.50	4.00	1.63	YES		NO
L0002194	0	0.28200E-07	377282.5	3747477.4	18.7	3.50	4.00	1.63	YES		NO
L0002195	0	0.28200E-07	377280.1	3747469.1	18.7	3.50	4.00	1.63	YES		NO
L0002196	0	0.28200E-07	377276.6	3747461.3	18.7	3.50	4.00	1.63	YES		NO
L0002197	0	0.28200E-07	377273.1	3747453.5	18.7	3.50	4.00	1.63	YES		NO
L0002198	0	0.28200E-07	377269.6	3747445.6	18.7	3.50	4.00	1.63	YES		NO
L0002199	0	0.28200E-07	377265.4	3747438.1	18.7	3.50	4.00	1.63	YES		NO
L0002200	0	0.28200E-07	377270.4	3747432.4	18.7	3.50	4.00	1.63	YES		NO
L0002201	0	0.28200E-07	377277.1	3747427.2	18.8	3.50	4.00	1.63	YES		NO
L0002202	0	0.28200E-07	377283.9	3747421.9	18.8	3.50	4.00	1.63	YES		NO
L0002203	0	0.22050E-07	377291.7	3747243.2	17.8	3.50	4.00	1.63	YES		NO
L0002204	0	0.22050E-07	377283.1	3747243.2	17.8	3.50	4.00	1.63	YES		NO
L0002205	0	0.22050E-07	377274.5	3747243.2	17.8	3.50	4.00	1.63	YES		NO
L0002206	0	0.22050E-07	377265.9	3747243.3	17.8	3.50	4.00	1.63	YES		NO
L0002207	0	0.22050E-07	377257.3	3747243.3	17.7	3.50	4.00	1.63	YES		NO
L0002208	0	0.22050E-07	377248.7	3747243.3	17.7	3.50	4.00	1.63	YES		NO

L0002209	0	0.22050E-07	377240.1	3747243.3	17.7	3.50	4.00	1.63	YES	NO
L0002210	0	0.22050E-07	377231.6	3747243.3	17.8	3.50	4.00	1.63	YES	NO
L0002211	0	0.22050E-07	377223.0	3747243.3	17.9	3.50	4.00	1.63	YES	NO
L0002212	0	0.22050E-07	377214.4	3747243.3	18.0	3.50	4.00	1.63	YES	NO

^ *** AERMOD - VERSION 23132 *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0002213	0	0.22050E-07	377205.8	3747243.3	18.0	3.50	4.00	1.63	YES		NO
L0002214	0	0.22050E-07	377197.2	3747243.3	18.0	3.50	4.00	1.63	YES		NO
L0002215	0	0.22050E-07	377188.6	3747243.3	17.9	3.50	4.00	1.63	YES		NO
L0002216	0	0.22050E-07	377180.0	3747243.3	18.0	3.50	4.00	1.63	YES		NO
L0002217	0	0.22050E-07	377171.4	3747243.3	18.0	3.50	4.00	1.63	YES		NO
L0002218	0	0.22050E-07	377162.8	3747243.3	18.1	3.50	4.00	1.63	YES		NO
L0002219	0	0.22050E-07	377154.2	3747243.3	18.2	3.50	4.00	1.63	YES		NO
L0002220	0	0.22050E-07	377145.6	3747243.3	18.3	3.50	4.00	1.63	YES		NO
L0002221	0	0.22050E-07	377137.1	3747243.4	18.4	3.50	4.00	1.63	YES		NO
L0002222	0	0.22050E-07	377128.5	3747243.4	18.4	3.50	4.00	1.63	YES		NO
L0002223	0	0.22050E-07	377119.9	3747243.4	18.4	3.50	4.00	1.63	YES		NO
L0002224	0	0.22050E-07	377111.3	3747243.4	18.4	3.50	4.00	1.63	YES		NO
L0002225	0	0.22050E-07	377102.7	3747243.4	18.4	3.50	4.00	1.63	YES		NO
L0002226	0	0.22050E-07	377094.1	3747243.4	18.5	3.50	4.00	1.63	YES		NO
L0002227	0	0.22050E-07	377085.5	3747243.4	18.5	3.50	4.00	1.63	YES		NO
L0002228	0	0.22050E-07	377076.9	3747243.4	18.5	3.50	4.00	1.63	YES		NO
L0002229	0	0.22050E-07	377068.3	3747243.4	18.6	3.50	4.00	1.63	YES		NO
L0002230	0	0.22050E-07	377059.7	3747243.4	18.6	3.50	4.00	1.63	YES		NO
L0002231	0	0.22050E-07	377051.1	3747243.4	18.7	3.50	4.00	1.63	YES		NO
L0002232	0	0.22050E-07	377042.6	3747243.4	18.7	3.50	4.00	1.63	YES		NO
L0002233	0	0.22050E-07	377034.0	3747243.4	18.7	3.50	4.00	1.63	YES		NO
L0002234	0	0.22050E-07	377025.4	3747243.4	18.8	3.50	4.00	1.63	YES		NO
L0002235	0	0.22050E-07	377016.8	3747243.4	18.9	3.50	4.00	1.63	YES		NO
L0002236	0	0.22050E-07	377008.2	3747243.5	18.9	3.50	4.00	1.63	YES		NO
L0002237	0	0.22050E-07	376999.6	3747243.5	18.9	3.50	4.00	1.63	YES		NO
L0002238	0	0.22050E-07	376991.0	3747243.5	18.8	3.50	4.00	1.63	YES		NO
L0002239	0	0.22050E-07	376982.4	3747243.5	18.8	3.50	4.00	1.63	YES		NO
L0002240	0	0.22050E-07	376973.8	3747243.5	18.9	3.50	4.00	1.63	YES		NO
L0002241	0	0.22050E-07	376965.2	3747243.5	19.0	3.50	4.00	1.63	YES		NO
L0002242	0	0.22050E-07	376956.6	3747243.5	19.1	3.50	4.00	1.63	YES		NO
L0002243	0	0.22050E-07	376948.1	3747243.5	19.1	3.50	4.00	1.63	YES		NO
L0002244	0	0.22050E-07	376939.5	3747243.5	19.1	3.50	4.00	1.63	YES		NO
L0002245	0	0.22050E-07	376930.9	3747243.5	19.1	3.50	4.00	1.63	YES		NO
L0002246	0	0.22050E-07	376922.3	3747243.5	19.1	3.50	4.00	1.63	YES		NO
L0002247	0	0.22050E-07	376913.7	3747243.5	19.1	3.50	4.00	1.63	YES		NO
L0002248	0	0.22050E-07	376905.1	3747243.5	19.2	3.50	4.00	1.63	YES		NO
L0002249	0	0.22050E-07	376896.5	3747243.5	19.2	3.50	4.00	1.63	YES		NO

L0002250	0	0.22050E-07	376887.9	3747243.5	19.3	3.50	4.00	1.63	YES		NO
L0002251	0	0.22050E-07	376879.3	3747243.6	19.4	3.50	4.00	1.63	YES		NO
L0002252	0	0.22050E-07	376870.7	3747243.6	19.4	3.50	4.00	1.63	YES		NO
*** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3										***	07/29/25
*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027										***	08:41:54
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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*											

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0002253	0	0.22050E-07	376862.1	3747243.6	19.4	3.50	4.00	1.63	YES		NO
L0002254	0	0.22050E-07	376853.6	3747243.6	19.4	3.50	4.00	1.63	YES		NO
L0002255	0	0.22050E-07	376845.0	3747243.6	19.4	3.50	4.00	1.63	YES		NO
L0002256	0	0.22050E-07	376836.4	3747243.6	19.4	3.50	4.00	1.63	YES		NO
L0002257	0	0.22050E-07	376827.8	3747243.6	19.4	3.50	4.00	1.63	YES		NO
L0002258	0	0.22050E-07	376819.2	3747243.6	19.4	3.50	4.00	1.63	YES		NO
L0002259	0	0.22050E-07	376810.6	3747243.6	19.5	3.50	4.00	1.63	YES		NO
L0002260	0	0.22050E-07	376802.0	3747243.6	19.5	3.50	4.00	1.63	YES		NO
L0002261	0	0.22050E-07	376793.4	3747243.6	19.5	3.50	4.00	1.63	YES		NO
L0002262	0	0.22050E-07	376784.8	3747243.6	19.5	3.50	4.00	1.63	YES		NO
L0002263	0	0.22050E-07	376776.2	3747243.6	19.5	3.50	4.00	1.63	YES		NO
L0002264	0	0.22050E-07	376767.7	3747243.6	19.6	3.50	4.00	1.63	YES		NO
L0002265	0	0.22050E-07	376759.1	3747243.6	19.6	3.50	4.00	1.63	YES		NO
L0002266	0	0.22050E-07	376750.5	3747243.7	19.7	3.50	4.00	1.63	YES		NO
L0002267	0	0.22050E-07	376741.9	3747243.7	19.7	3.50	4.00	1.63	YES		NO
L0002268	0	0.22050E-07	376733.3	3747243.7	19.7	3.50	4.00	1.63	YES		NO
L0002269	0	0.22050E-07	376724.7	3747243.7	19.7	3.50	4.00	1.63	YES		NO
L0002270	0	0.22050E-07	376716.1	3747243.7	19.8	3.50	4.00	1.63	YES		NO
L0002271	0	0.22050E-07	376707.5	3747243.7	19.9	3.50	4.00	1.63	YES		NO
L0002272	0	0.22050E-07	376698.9	3747243.7	19.9	3.50	4.00	1.63	YES		NO
L0002273	0	0.22050E-07	376690.3	3747243.7	20.0	3.50	4.00	1.63	YES		NO
L0002274	0	0.22050E-07	376681.7	3747243.7	20.0	3.50	4.00	1.63	YES		NO
L0002275	0	0.22050E-07	376673.2	3747243.7	20.1	3.50	4.00	1.63	YES		NO
L0002276	0	0.41050E-07	377300.6	3747243.3	17.9	3.50	4.00	1.63	YES		NO
L0002277	0	0.41050E-07	377309.2	3747243.3	18.0	3.50	4.00	1.63	YES		NO
L0002278	0	0.41050E-07	377317.7	3747243.3	18.1	3.50	4.00	1.63	YES		NO
L0002279	0	0.41050E-07	377326.3	3747243.3	18.2	3.50	4.00	1.63	YES		NO
L0002280	0	0.41050E-07	377334.9	3747243.3	18.3	3.50	4.00	1.63	YES		NO
L0002281	0	0.41050E-07	377343.5	3747243.3	18.4	3.50	4.00	1.63	YES		NO
L0002282	0	0.41050E-07	377352.1	3747243.3	18.5	3.50	4.00	1.63	YES		NO
L0002283	0	0.41050E-07	377360.7	3747243.4	18.6	3.50	4.00	1.63	YES		NO
L0002284	0	0.41050E-07	377369.3	3747243.4	18.7	3.50	4.00	1.63	YES		NO
L0002285	0	0.41050E-07	377377.9	3747243.4	18.8	3.50	4.00	1.63	YES		NO
L0002286	0	0.41050E-07	377386.5	3747243.4	18.8	3.50	4.00	1.63	YES		NO
L0002287	0	0.41050E-07	377395.1	3747243.4	18.9	3.50	4.00	1.63	YES		NO
L0002288	0	0.41050E-07	377403.7	3747243.4	19.0	3.50	4.00	1.63	YES		NO
L0002289	0	0.41050E-07	377412.2	3747243.4	19.2	3.50	4.00	1.63	YES		NO
L0002290	0	0.41050E-07	377420.8	3747243.4	19.3	3.50	4.00	1.63	YES		NO

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*** MODELOPTs:  RegDFAULT  CONC  ELEV  URBAN  ADJ  U*
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SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X Y		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
			(METERS)	(METERS)							
L0002293	0	0.41050E-07	377446.6	3747243.4	19.6	3.50	4.00	1.63	YES		NO
L0002294	0	0.41050E-07	377455.2	3747243.4	19.7	3.50	4.00	1.63	YES		NO
L0002295	0	0.41050E-07	377463.8	3747243.4	19.7	3.50	4.00	1.63	YES		NO
L0002296	0	0.41050E-07	377472.4	3747243.4	19.8	3.50	4.00	1.63	YES		NO
L0002297	0	0.41050E-07	377481.0	3747243.4	19.8	3.50	4.00	1.63	YES		NO
L0002298	0	0.41050E-07	377489.6	3747243.4	19.8	3.50	4.00	1.63	YES		NO
L0002299	0	0.41050E-07	377498.1	3747243.4	19.8	3.50	4.00	1.63	YES		NO
L0002300	0	0.41050E-07	377506.7	3747243.4	19.7	3.50	4.00	1.63	YES		NO
L0002301	0	0.41050E-07	377515.3	3747243.4	19.7	3.50	4.00	1.63	YES		NO
L0002302	0	0.41050E-07	377523.9	3747243.4	19.6	3.50	4.00	1.63	YES		NO
L0002303	0	0.41050E-07	377532.5	3747243.4	19.6	3.50	4.00	1.63	YES		NO
L0002304	0	0.41050E-07	377541.1	3747243.4	19.5	3.50	4.00	1.63	YES		NO
L0002305	0	0.41050E-07	377549.7	3747243.5	19.5	3.50	4.00	1.63	YES		NO
L0002306	0	0.41050E-07	377558.3	3747243.5	19.5	3.50	4.00	1.63	YES		NO
L0002307	0	0.41050E-07	377566.9	3747243.5	19.5	3.50	4.00	1.63	YES		NO
L0002308	0	0.41050E-07	377575.5	3747243.5	19.4	3.50	4.00	1.63	YES		NO
L0002309	0	0.41050E-07	377584.1	3747243.5	19.4	3.50	4.00	1.63	YES		NO
L0002310	0	0.41050E-07	377592.6	3747243.5	19.3	3.50	4.00	1.63	YES		NO
L0002311	0	0.41050E-07	377601.2	3747243.5	19.2	3.50	4.00	1.63	YES		NO
L0002312	0	0.41050E-07	377609.8	3747243.5	19.2	3.50	4.00	1.63	YES		NO
L0002313	0	0.41050E-07	377618.4	3747243.5	19.2	3.50	4.00	1.63	YES		NO
L0002314	0	0.41050E-07	377627.0	3747243.5	19.1	3.50	4.00	1.63	YES		NO
L0002315	0	0.41050E-07	377635.6	3747243.5	19.1	3.50	4.00	1.63	YES		NO
L0002316	0	0.41050E-07	377644.2	3747243.5	19.0	3.50	4.00	1.63	YES		NO
L0002317	0	0.41050E-07	377652.8	3747243.5	19.0	3.50	4.00	1.63	YES		NO
L0002318	0	0.41050E-07	377661.4	3747243.5	18.9	3.50	4.00	1.63	YES		NO
L0002319	0	0.41050E-07	377670.0	3747243.5	18.9	3.50	4.00	1.63	YES		NO
L0002320	0	0.41050E-07	377678.6	3747243.5	18.8	3.50	4.00	1.63	YES		NO
L0002321	0	0.41050E-07	377687.1	3747243.5	18.8	3.50	4.00	1.63	YES		NO
L0002322	0	0.41050E-07	377695.7	3747243.5	18.7	3.50	4.00	1.63	YES		NO
L0002323	0	0.41050E-07	377704.3	3747243.5	18.7	3.50	4.00	1.63	YES		NO
L0002324	0	0.41050E-07	377712.9	3747243.5	18.6	3.50	4.00	1.63	YES		NO
L0002325	0	0.41050E-07	377721.5	3747243.5	18.6	3.50	4.00	1.63	YES		NO
L0002326	0	0.41050E-07	377730.1	3747243.5	18.						

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L0002332      0  0.41050E-07 377781.6 3747243.6   18.2    3.50    4.00    1.63    YES                NO
^ *** AERMOD - VERSION 23132 ***   *** 190th St Warehouse V3                ***      07/29/25
*** AERMET - VERSION 22112 ***   *** DPM concentrations for OY 2027          ***      08:41:54
                                                                PAGE      8

*** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ  U*

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*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X Y		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
			(METERS)	(METERS)							
L0002333	0	0.41050E-07	377790.2	3747243.6	18.2	3.50	4.00	1.63	YES		NO
L0002334	0	0.41050E-07	377798.8	3747243.6	18.2	3.50	4.00	1.63	YES		NO
L0002335	0	0.41050E-07	377807.4	3747243.6	18.2	3.50	4.00	1.63	YES		NO
L0002336	0	0.41050E-07	377816.0	3747243.6	18.2	3.50	4.00	1.63	YES		NO
L0002337	0	0.41050E-07	377824.6	3747243.6	18.2	3.50	4.00	1.63	YES		NO
L0002338	0	0.41050E-07	377833.2	3747243.6	18.3	3.50	4.00	1.63	YES		NO
L0002339	0	0.41050E-07	377841.8	3747243.6	18.3	3.50	4.00	1.63	YES		NO
L0002340	0	0.41050E-07	377850.4	3747243.6	18.3	3.50	4.00	1.63	YES		NO
L0002341	0	0.41050E-07	377859.0	3747243.6	18.3	3.50	4.00	1.63	YES		NO
L0002342	0	0.41050E-07	377867.6	3747243.6	18.3	3.50	4.00	1.63	YES		NO
L0002343	0	0.41050E-07	377876.1	3747243.6	18.4	3.50	4.00	1.63	YES		NO
L0002344	0	0.41050E-07	377884.7	3747243.6	18.4	3.50	4.00	1.63	YES		NO
L0002345	0	0.41050E-07	377893.3	3747243.6	18.5	3.50	4.00	1.63	YES		NO
L0002346	0	0.41050E-07	377901.9	3747243.6	18.6	3.50	4.00	1.63	YES		NO
L0002347	0	0.41050E-07	377910.5	3747243.6	18.6	3.50	4.00	1.63	YES		NO
L0002348	0	0.41050E-07	377919.1	3747243.6	18.7	3.50	4.00	1.63	YES		NO
L0002349	0	0.41050E-07	377927.7	3747243.7	18.7	3.50	4.00	1.63	YES		NO
L0002350	0	0.41050E-07	377936.3	3747243.7	18.8	3.50	4.00	1.63	YES		NO
L0002351	0	0.41050E-07	377944.9	3747243.7	18.9	3.50	4.00	1.63	YES		NO
L0002352	0	0.41050E-07	377953.5	3747243.7	19.1	3.50	4.00	1.63	YES		NO
L0002353	0	0.41050E-07	377962.1	3747243.7	19.2	3.50	4.00	1.63	YES		NO
L0002354	0	0.41050E-07	377970.6	3747243.7	19.1	3.50	4.00	1.63	YES		NO
L0002355	0	0.41050E-07	377979.2	3747243.7	19.1	3.50	4.00	1.63	YES		NO
L0002356	0	0.41050E-07	377987.8	3747243.7	19.1	3.50	4.00	1.63	YES		NO
L0002357	0	0.41050E-07	377996.4	3747243.7	19.2	3.50	4.00	1.63	YES		NO
L0002358	0	0.41050E-07	378005.0	3747243.7	19.2	3.50	4.00	1.63	YES		NO
L0002359	0	0.41050E-07	378013.6	3747243.7	19.2	3.50	4.00	1.63	YES		NO
L0002360	0	0.41050E-07	378022.2	3747243.7	19.3	3.50	4.00	1.63	YES		NO
L0002361	0	0.41050E-07	378030.8	3747243.7	19.3	3.50	4.00	1.63	YES		NO
L0002362	0	0.41050E-07	378039.4	3747243.7	19.4	3.50	4.00	1.63	YES		NO
L0002363	0	0.41050E-07	378048.0	3747243.7	19.5	3.50	4.00	1.63	YES		NO
L0002364	0	0.41050E-07	378056.6	3747243.7	19.6	3.50	4.00	1.63	YES		NO
L0002365	0	0.41050E-07	378065.1	3747243.7	19.7	3.50	4.00	1.63	YES		NO
L0002366	0	0.41050E-07	378073.7	3747243.7	19.						

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0002373	0	0.41050E-07	378133.9	3747243.8	19.9	3.50	4.00	1.63	YES		NO
L0002374	0	0.41050E-07	378142.5	3747243.8	19.9	3.50	4.00	1.63	YES		NO
L0002375	0	0.41050E-07	378151.1	3747243.8	19.9	3.50	4.00	1.63	YES		NO
L0002376	0	0.41050E-07	378159.6	3747243.8	19.9	3.50	4.00	1.63	YES		NO
L0002377	0	0.41050E-07	378168.2	3747243.8	19.8	3.50	4.00	1.63	YES		NO
L0002378	0	0.41050E-07	378176.8	3747243.8	19.8	3.50	4.00	1.63	YES		NO
L0002379	0	0.41050E-07	378185.4	3747243.8	19.7	3.50	4.00	1.63	YES		NO
L0002380	0	0.41050E-07	378194.0	3747243.8	19.6	3.50	4.00	1.63	YES		NO
L0002381	0	0.41050E-07	378202.6	3747243.8	19.7	3.50	4.00	1.63	YES		NO
L0002382	0	0.41050E-07	378211.2	3747243.8	19.7	3.50	4.00	1.63	YES		NO
L0002383	0	0.41050E-07	378219.8	3747243.8	19.7	3.50	4.00	1.63	YES		NO
L0002384	0	0.41050E-07	378228.4	3747243.8	19.7	3.50	4.00	1.63	YES		NO
L0002385	0	0.41050E-07	378237.0	3747243.8	19.7	3.50	4.00	1.63	YES		NO
L0002386	0	0.41050E-07	378245.5	3747243.8	19.6	3.50	4.00	1.63	YES		NO
L0002387	0	0.41050E-07	378254.1	3747243.8	19.5	3.50	4.00	1.63	YES		NO
L0002388	0	0.41050E-07	378262.7	3747243.8	19.4	3.50	4.00	1.63	YES		NO
L0002389	0	0.41050E-07	378271.3	3747243.8	19.3	3.50	4.00	1.63	YES		NO
L0002390	0	0.41050E-07	378279.9	3747243.8	19.4	3.50	4.00	1.63	YES		NO
L0002391	0	0.41050E-07	378288.5	3747243.8	19.4	3.50	4.00	1.63	YES		NO
L0002392	0	0.41050E-07	378297.1	3747243.8	19.4	3.50	4.00	1.63	YES		NO
L0002393	0	0.41050E-07	378305.7	3747243.9	19.4	3.50	4.00	1.63	YES		NO
L0002394	0	0.41050E-07	378314.3	3747243.9	19.4	3.50	4.00	1.63	YES		NO
L0002395	0	0.41050E-07	378322.9	3747243.9	19.4	3.50	4.00	1.63	YES		NO
L0002396	0	0.41050E-07	378331.5	3747243.9	19.3	3.50	4.00	1.63	YES		NO
L0002397	0	0.41050E-07	378340.0	3747243.9	19.3	3.50	4.00	1.63	YES		NO
L0002398	0	0.41050E-07	378348.6	3747243.9	19.2	3.50	4.00	1.63	YES		NO
L0002399	0	0.41050E-07	378357.2	3747243.9	19.2	3.50	4.00	1.63	YES		NO
L0002400	0	0.41050E-07	378365.8	3747243.9	19.2	3.50	4.00	1.63	YES		NO
L0002401	0	0.41050E-07	378374.4	3747243.9	19.2	3.50	4.00	1.63	YES		NO
L0002402	0	0.41050E-07	378383.0	3747243.9	19.2	3.50	4.00	1.63	YES		NO
L0002403	0	0.41050E-07	378391.6	3747243.9	19.2	3.50	4.00	1.63	YES		NO
L0002404	0	0.41050E-07	378400.2	3747243.9	19.2	3.50	4.00	1.63	YES		NO
L0002405	0	0.41050E-07	378408.8	3747243.9	19.1	3.50	4.00	1.63	YES		NO
L0002406	0	0.41050E-07	378417.4	3747243.9	19.0	3.50	4.00	1.63	YES		NO
L0002407	0	0.41050E-07	378426.0	3747243.9	19.0	3.50	4.00	1.63	YES		NO
L0002408	0	0.41050E-07	378434.5	3747243.9	19.1	3.50	4.00	1.63	YES		NO
L0002409	0	0.41050E-07	378443.1	3747243.9	19.2	3.50	4.00	1.63	YES		NO
L0002410	0	0.41050E-07	378451.7	3747243.9	19.2	3.50	4.00	1.63	YES		NO
L0002411	0	0.41050E-07	378460.3	3747243.9	19.2	3.50	4.00	1.63	YES		NO
L0002412	0	0.41050E-07	378468.9	3747243.9	19.2	3.50	4.00	1.63	YES		NO

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3

*** 07/29/25

*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 08:41:54
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0002413	0	0.41050E-07	378477.5	3747243.9	19.2	3.50	4.00	1.63	YES		NO
L0002414	0	0.41050E-07	378486.1	3747243.9	19.1	3.50	4.00	1.63	YES		NO
L0002415	0	0.41050E-07	378494.7	3747244.0	19.0	3.50	4.00	1.63	YES		NO
L0002416	0	0.41050E-07	378503.3	3747244.0	19.0	3.50	4.00	1.63	YES		NO
L0002417	0	0.41050E-07	378511.9	3747244.0	18.9	3.50	4.00	1.63	YES		NO
L0002418	0	0.41050E-07	378520.5	3747244.0	18.9	3.50	4.00	1.63	YES		NO
L0002419	0	0.41050E-07	378529.0	3747244.0	18.9	3.50	4.00	1.63	YES		NO
L0002420	0	0.41050E-07	378537.6	3747244.0	18.8	3.50	4.00	1.63	YES		NO
L0002421	0	0.41050E-07	378546.2	3747244.0	18.8	3.50	4.00	1.63	YES		NO
L0002422	0	0.41050E-07	378554.8	3747244.0	18.7	3.50	4.00	1.63	YES		NO
L0002423	0	0.41050E-07	378563.4	3747244.0	18.7	3.50	4.00	1.63	YES		NO
L0002424	0	0.41050E-07	378572.0	3747244.0	18.6	3.50	4.00	1.63	YES		NO
L0002425	0	0.41050E-07	378580.6	3747244.0	18.6	3.50	4.00	1.63	YES		NO
L0002426	0	0.41050E-07	378589.2	3747244.0	18.6	3.50	4.00	1.63	YES		NO
L0002427	0	0.41050E-07	378597.8	3747244.0	18.7	3.50	4.00	1.63	YES		NO
L0002428	0	0.41050E-07	378606.4	3747244.0	18.7	3.50	4.00	1.63	YES		NO
L0002429	0	0.41050E-07	378615.0	3747244.0	18.7	3.50	4.00	1.63	YES		NO
L0002430	0	0.41050E-07	378623.5	3747244.0	18.7	3.50	4.00	1.63	YES		NO
L0002431	0	0.41050E-07	378632.1	3747244.0	18.7	3.50	4.00	1.63	YES		NO
L0002432	0	0.41050E-07	378640.7	3747244.0	18.6	3.50	4.00	1.63	YES		NO
L0002433	0	0.41050E-07	378649.3	3747244.0	18.6	3.50	4.00	1.63	YES		NO
L0002434	0	0.41050E-07	378657.9	3747244.0	18.5	3.50	4.00	1.63	YES		NO
L0002435	0	0.41050E-07	378666.5	3747244.0	18.4	3.50	4.00	1.63	YES		NO
L0002436	0	0.41050E-07	378675.1	3747244.0	18.4	3.50	4.00	1.63	YES		NO
L0002437	0	0.41050E-07	378683.7	3747244.1	18.3	3.50	4.00	1.63	YES		NO
L0002438	0	0.41050E-07	378692.3	3747244.1	18.4	3.50	4.00	1.63	YES		NO
L0002439	0	0.41050E-07	378700.9	3747244.1	18.4	3.50	4.00	1.63	YES		NO
L0002440	0	0.41050E-07	378709.5	3747244.1	18.4	3.50	4.00	1.63	YES		NO
L0002441	0	0.41050E-07	378718.0	3747244.1	18.4	3.50	4.00	1.63	YES		NO
L0002442	0	0.41050E-07	378726.6	3747244.1	18.4	3.50	4.00	1.63	YES		NO
L0002443	0	0.41050E-07	378735.2	3747244.1	18.3	3.50	4.00	1.63	YES		NO
L0002444	0	0.41050E-07	378743.8	3747244.1	18.2	3.50	4.00	1.63	YES		NO
L0002445	0	0.41050E-07	378752.4	3747244.1	18.2	3.50	4.00	1.63	YES		NO
L0002446	0	0.41050E-07	378761.0	3747244.1	18.1	3.50	4.00	1.63	YES		NO
L0002447	0	0.41050E-07	378769.6	3747244.1	18.1	3.50	4.00	1.63	YES		NO
L0002080	0	0.12260E-06	377316.1	3747421.6	19.0	3.50	4.00	5.10	YES		NO
L0002081	0	0.12260E-06	377324.5	3747423.1	19.0	3.50	4.00	5.10	YES		NO
L0002082	0	0.12260E-06	377333.0	3747424.5	19.1	3.50	4.00	5.10	YES		NO
L0002083	0	0.12260E-06	377341.5	3747425.7	19.1	3.50	4.00	5.10	YES		NO
L0002084	0	0.12260E-06	377350.1	3747425.7	19.2	3.50	4.00	5.10	YES		NO

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3

*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
*** 08:41:54

*** MODELOPTS: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0002085	0	0.12260E-06	377358.7	3747425.7	19.2	3.50	4.00	5.10	YES		NO
L0002086	0	0.12260E-06	377367.3	3747425.7	19.3	3.50	4.00	5.10	YES		NO
L0002087	0	0.12260E-06	377375.8	3747425.7	19.4	3.50	4.00	5.10	YES		NO
L0002088	0	0.12260E-06	377384.4	3747425.7	19.4	3.50	4.00	5.10	YES		NO
L0002089	0	0.12260E-06	377393.0	3747425.7	19.5	3.50	4.00	5.10	YES		NO
L0002090	0	0.12260E-06	377401.6	3747425.7	19.6	3.50	4.00	5.10	YES		NO
L0002091	0	0.12260E-06	377410.2	3747425.7	19.6	3.50	4.00	5.10	YES		NO
L0002092	0	0.12260E-06	377418.8	3747425.7	19.7	3.50	4.00	5.10	YES		NO
L0002093	0	0.12260E-06	377427.4	3747425.7	19.7	3.50	4.00	5.10	YES		NO
L0002094	0	0.12260E-06	377436.0	3747425.7	19.8	3.50	4.00	5.10	YES		NO
L0002095	0	0.12260E-06	377444.6	3747425.7	19.9	3.50	4.00	5.10	YES		NO
L0002096	0	0.12260E-06	377453.2	3747425.7	19.9	3.50	4.00	5.10	YES		NO
L0002097	0	0.12260E-06	377461.8	3747425.7	20.0	3.50	4.00	5.10	YES		NO
L0002098	0	0.12260E-06	377470.3	3747425.8	20.0	3.50	4.00	5.10	YES		NO
L0002099	0	0.12260E-06	377478.9	3747425.8	20.1	3.50	4.00	5.10	YES		NO
L0002100	0	0.12260E-06	377487.5	3747425.8	20.1	3.50	4.00	5.10	YES		NO
L0002101	0	0.12260E-06	377496.1	3747425.8	20.2	3.50	4.00	5.10	YES		NO
L0002102	0	0.12260E-06	377504.7	3747425.8	20.2	3.50	4.00	5.10	YES		NO
L0002103	0	0.12260E-06	377513.3	3747425.8	20.2	3.50	4.00	5.10	YES		NO
L0002104	0	0.12260E-06	377521.9	3747425.8	20.2	3.50	4.00	5.10	YES		NO
L0002105	0	0.12260E-06	377530.5	3747425.8	20.3	3.50	4.00	5.10	YES		NO
L0002106	0	0.12260E-06	377539.1	3747425.8	20.4	3.50	4.00	5.10	YES		NO
L0002107	0	0.12260E-06	377547.7	3747425.8	20.5	3.50	4.00	5.10	YES		NO
L0002108	0	0.12260E-06	377556.3	3747425.8	20.5	3.50	4.00	5.10	YES		NO
L0002109	0	0.12260E-06	377564.8	3747425.8	20.4	3.50	4.00	5.10	YES		NO
L0002110	0	0.12260E-06	377573.4	3747425.8	20.4	3.50	4.00	5.10	YES		NO
L0002111	0	0.12260E-06	377582.0	3747425.4	20.4	3.50	4.00	5.10	YES		NO
L0002112	0	0.12260E-06	377589.2	3747421.3	20.4	3.50	4.00	5.10	YES		NO
L0002113	0	0.12260E-06	377591.0	3747413.1	20.6	3.50	4.00	5.10	YES		NO
L0002114	0	0.12260E-06	377591.1	3747404.6	20.9	3.50	4.00	5.10	YES		NO
L0002115	0	0.12260E-06	377591.2	3747396.0	20.8	3.50	4.00	5.10	YES		NO
L0002116	0	0.12260E-06	377591.3	3747387.4	20.7	3.50	4.00	5.10	YES		NO
L0002117	0	0.12260E-06	377591.4	3747378.8	20.6	3.50	4.00	5.10	YES		NO
L0002118	0	0.12260E-06	377591.5	3747370.2	20.6	3.50	4.00	5.10	YES		NO
L0002119	0	0.12260E-06	377591.6	3747361.6	20.5	3.50	4.00	5.10	YES		NO
L0002120	0	0.12260E-06	377591.7	3747353.0	20.4	3.50	4.00	5.10	YES		NO
L0002121	0	0.12260E-06	377591.8	3747344.4	20.4	3.50	4.00	5.10	YES		NO
L0002122	0	0.12260E-06	377591.9	3747335.8	20.2	3.50	4.00	5.10	YES		NO
L0002123	0	0.12260E-06	377592.0	3747327.2	20.0	3.50	4.00	5.10	YES		NO
L0002124	0	0.12260E-06	377597.0	3747321.0	19.7	3.50	4.00	5.10	YES		NO

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
L0002125	0	0.12260E-06	377603.2	3747315.3	19.6	3.50	4.00	5.10	YES		NO
L0002126	0	0.12260E-06	377605.6	3747307.2	19.6	3.50	4.00	5.10	YES		NO
L0002127	0	0.12260E-06	377606.2	3747298.6	19.7	3.50	4.00	5.10	YES		NO
L0002128	0	0.12260E-06	377606.4	3747290.0	19.7	3.50	4.00	5.10	YES		NO
L0002129	0	0.12260E-06	377606.6	3747281.4	19.8	3.50	4.00	5.10	YES		NO
L0002130	0	0.12260E-06	377606.7	3747272.8	19.6	3.50	4.00	5.10	YES		NO
L0002131	0	0.12260E-06	377606.9	3747264.3	19.4	3.50	4.00	5.10	YES		NO
L0002132	0	0.12260E-06	377607.0	3747255.7	19.3	3.50	4.00	5.10	YES		NO
*** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3 *** 07/29/25											
*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027 *** 08:41:54											
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
PAREA1	0	0.42722E-08	377306.0	3747440.1	19.1	1.83	6	0.00	YES		NO
*** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3 *** 07/29/25											
*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027 *** 08:41:54											
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	STCK1 , STCK2 , STCK3 , STCK4 , STCK5 , STCK6 , STCK7 , STCK8 ,
	L0002133 , L0002134 , L0002135 , L0002136 , L0002137 , L0002138 , L0002139 , L0002140 ,
	L0002141 , L0002142 , L0002143 , L0002144 , L0002145 , L0002146 , L0002147 , L0002148 ,
	L0002149 , L0002150 , L0002151 , L0002152 , L0002153 , L0002154 , L0002155 , L0002156 ,
	L0002157 , L0002158 , L0002159 , L0002160 , L0002161 , L0002162 , L0002163 , L0002164 ,

L0002165	,	L0002166	,	L0002167	,	L0002168	,	L0002169	,	L0002170	,	L0002171	,	L0002172	,
L0002173	,	L0002174	,	L0002175	,	L0002176	,	L0002177	,	L0002178	,	L0002179	,	L0002180	,
L0002181	,	L0002182	,	L0002183	,	L0002184	,	L0002185	,	L0002186	,	L0002187	,	L0002188	,
L0002189	,	L0002190	,	L0002191	,	L0002192	,	L0002193	,	L0002194	,	L0002195	,	L0002196	,
L0002197	,	L0002198	,	L0002199	,	L0002200	,	L0002201	,	L0002202	,	L0002203	,	L0002204	,
L0002205	,	L0002206	,	L0002207	,	L0002208	,	L0002209	,	L0002210	,	L0002211	,	L0002212	,
L0002213	,	L0002214	,	L0002215	,	L0002216	,	L0002217	,	L0002218	,	L0002219	,	L0002220	,
L0002221	,	L0002222	,	L0002223	,	L0002224	,	L0002225	,	L0002226	,	L0002227	,	L0002228	,
L0002229	,	L0002230	,	L0002231	,	L0002232	,	L0002233	,	L0002234	,	L0002235	,	L0002236	,
L0002237	,	L0002238	,	L0002239	,	L0002240	,	L0002241	,	L0002242	,	L0002243	,	L0002244	,
L0002245	,	L0002246	,	L0002247	,	L0002248	,	L0002249	,	L0002250	,	L0002251	,	L0002252	,
L0002253	,	L0002254	,	L0002255	,	L0002256	,	L0002257	,	L0002258	,	L0002259	,	L0002260	,
L0002261	,	L0002262	,	L0002263	,	L0002264	,	L0002265	,	L0002266	,	L0002267	,	L0002268	,
L0002269	,	L0002270	,	L0002271	,	L0002272	,	L0002273	,	L0002274	,	L0002275	,	L0002276	,
L0002277	,	L0002278	,	L0002279	,	L0002280	,	L0002281	,	L0002282	,	L0002283	,	L0002284	,

*** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

L0002285	,	L0002286	,	L0002287	,	L0002288	,	L0002289	,	L0002290	,	L0002291	,	L0002292	,
L0002293	,	L0002294	,	L0002295	,	L0002296	,	L0002297	,	L0002298	,	L0002299	,	L0002300	,
L0002301	,	L0002302	,	L0002303	,	L0002304	,	L0002305	,	L0002306	,	L0002307	,	L0002308	,
L0002309	,	L0002310	,	L0002311	,	L0002312	,	L0002313	,	L0002314	,	L0002315	,	L0002316	,
L0002317	,	L0002318	,	L0002319	,	L0002320	,	L0002321	,	L0002322	,	L0002323	,	L0002324	,
L0002325	,	L0002326	,	L0002327	,	L0002328	,	L0002329	,	L0002330	,	L0002331	,	L0002332	,
L0002333	,	L0002334	,	L0002335	,	L0002336	,	L0002337	,	L0002338	,	L0002339	,	L0002340	,

L0002341	,	L0002342	,	L0002343	,	L0002344	,	L0002345	,	L0002346	,	L0002347	,	L0002348	,
L0002349	,	L0002350	,	L0002351	,	L0002352	,	L0002353	,	L0002354	,	L0002355	,	L0002356	,
L0002357	,	L0002358	,	L0002359	,	L0002360	,	L0002361	,	L0002362	,	L0002363	,	L0002364	,
L0002365	,	L0002366	,	L0002367	,	L0002368	,	L0002369	,	L0002370	,	L0002371	,	L0002372	,
L0002373	,	L0002374	,	L0002375	,	L0002376	,	L0002377	,	L0002378	,	L0002379	,	L0002380	,
L0002381	,	L0002382	,	L0002383	,	L0002384	,	L0002385	,	L0002386	,	L0002387	,	L0002388	,
L0002389	,	L0002390	,	L0002391	,	L0002392	,	L0002393	,	L0002394	,	L0002395	,	L0002396	,
L0002397	,	L0002398	,	L0002399	,	L0002400	,	L0002401	,	L0002402	,	L0002403	,	L0002404	,
L0002405	,	L0002406	,	L0002407	,	L0002408	,	L0002409	,	L0002410	,	L0002411	,	L0002412	,
L0002413	,	L0002414	,	L0002415	,	L0002416	,	L0002417	,	L0002418	,	L0002419	,	L0002420	,
L0002421	,	L0002422	,	L0002423	,	L0002424	,	L0002425	,	L0002426	,	L0002427	,	L0002428	,
L0002429	,	L0002430	,	L0002431	,	L0002432	,	L0002433	,	L0002434	,	L0002435	,	L0002436	,
L0002437	,	L0002438	,	L0002439	,	L0002440	,	L0002441	,	L0002442	,	L0002443	,	L0002444	,

*** AERMOD - VERSION 23132 ***
 *** AERMET - VERSION 22112 ***

*** 190th St Warehouse V3
 *** DPM concentrations for OY 2027
 *** 07/29/25 08:41:54
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID

SOURCE IDs

L0002445	,	L0002446	,	L0002447	,	L0002080	,	L0002081	,	L0002082	,	L0002083	,	L0002084	,
L0002085	,	L0002086	,	L0002087	,	L0002088	,	L0002089	,	L0002090	,	L0002091	,	L0002092	,
L0002093	,	L0002094	,	L0002095	,	L0002096	,	L0002097	,	L0002098	,	L0002099	,	L0002100	,
L0002101	,	L0002102	,	L0002103	,	L0002104	,	L0002105	,	L0002106	,	L0002107	,	L0002108	,
L0002109	,	L0002110	,	L0002111	,	L0002112	,	L0002113	,	L0002114	,	L0002115	,	L0002116	,
L0002117	,	L0002118	,	L0002119	,	L0002120	,	L0002121	,	L0002122	,	L0002123	,	L0002124	,
L0002125	,	L0002126	,	L0002127	,	L0002128	,	L0002129	,	L0002130	,	L0002131	,	L0002132	,

PAREA1
 *** AERMOD - VERSION 23132 ***
 *** 190th St Warehouse V3

*** 07/29/25

*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 08:41:54
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs							
-----	-----	-----							
STCK8	9663345.	STCK1	, STCK2	, STCK3	, STCK4	, STCK5	, STCK6	, STCK7	,
	,								
	L0002133	, L0002134	, L0002135	, L0002136	, L0002137	, L0002138	, L0002139	, L0002140	,
	L0002141	, L0002142	, L0002143	, L0002144	, L0002145	, L0002146	, L0002147	, L0002148	,
	L0002149	, L0002150	, L0002151	, L0002152	, L0002153	, L0002154	, L0002155	, L0002156	,
	L0002157	, L0002158	, L0002159	, L0002160	, L0002161	, L0002162	, L0002163	, L0002164	,
	L0002165	, L0002166	, L0002167	, L0002168	, L0002169	, L0002170	, L0002171	, L0002172	,
	L0002173	, L0002174	, L0002175	, L0002176	, L0002177	, L0002178	, L0002179	, L0002180	,
	L0002181	, L0002182	, L0002183	, L0002184	, L0002185	, L0002186	, L0002187	, L0002188	,
	L0002189	, L0002190	, L0002191	, L0002192	, L0002193	, L0002194	, L0002195	, L0002196	,
	L0002197	, L0002198	, L0002199	, L0002200	, L0002201	, L0002202	, L0002203	, L0002204	,
	L0002205	, L0002206	, L0002207	, L0002208	, L0002209	, L0002210	, L0002211	, L0002212	,
	L0002213	, L0002214	, L0002215	, L0002216	, L0002217	, L0002218	, L0002219	, L0002220	,
	L0002221	, L0002222	, L0002223	, L0002224	, L0002225	, L0002226	, L0002227	, L0002228	,
	L0002229	, L0002230	, L0002231	, L0002232	, L0002233	, L0002234	, L0002235	, L0002236	,
	L0002237	, L0002238	, L0002239	, L0002240	, L0002241	, L0002242	, L0002243	, L0002244	,
	L0002245	, L0002246	, L0002247	, L0002248	, L0002249	, L0002250	, L0002251	, L0002252	,
	L0002253	, L0002254	, L0002255	, L0002256	, L0002257	, L0002258	, L0002259	, L0002260	,
	L0002261	, L0002262	, L0002263	, L0002264	, L0002265	, L0002266	, L0002267	, L0002268	,
	L0002269	, L0002270	, L0002271	, L0002272	, L0002273	, L0002274	, L0002275	, L0002276	,
	L0002277	, L0002278	, L0002279	, L0002280	, L0002281	, L0002282	, L0002283	, L0002284	,

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
-----	-----	-----
L0002285	, L0002286	, L0002287 , L0002288 , L0002289 , L0002290 , L0002291 , L0002292 ,
L0002293	, L0002294	, L0002295 , L0002296 , L0002297 , L0002298 , L0002299 , L0002300 ,
L0002301	, L0002302	, L0002303 , L0002304 , L0002305 , L0002306 , L0002307 , L0002308 ,
L0002309	, L0002310	, L0002311 , L0002312 , L0002313 , L0002314 , L0002315 , L0002316 ,
L0002317	, L0002318	, L0002319 , L0002320 , L0002321 , L0002322 , L0002323 , L0002324 ,
L0002325	, L0002326	, L0002327 , L0002328 , L0002329 , L0002330 , L0002331 , L0002332 ,
L0002333	, L0002334	, L0002335 , L0002336 , L0002337 , L0002338 , L0002339 , L0002340 ,
L0002341	, L0002342	, L0002343 , L0002344 , L0002345 , L0002346 , L0002347 , L0002348 ,
L0002349	, L0002350	, L0002351 , L0002352 , L0002353 , L0002354 , L0002355 , L0002356 ,
L0002357	, L0002358	, L0002359 , L0002360 , L0002361 , L0002362 , L0002363 , L0002364 ,
L0002365	, L0002366	, L0002367 , L0002368 , L0002369 , L0002370 , L0002371 , L0002372 ,
L0002373	, L0002374	, L0002375 , L0002376 , L0002377 , L0002378 , L0002379 , L0002380 ,
L0002381	, L0002382	, L0002383 , L0002384 , L0002385 , L0002386 , L0002387 , L0002388 ,
L0002389	, L0002390	, L0002391 , L0002392 , L0002393 , L0002394 , L0002395 , L0002396 ,
L0002397	, L0002398	, L0002399 , L0002400 , L0002401 , L0002402 , L0002403 , L0002404 ,
L0002405	, L0002406	, L0002407 , L0002408 , L0002409 , L0002410 , L0002411 , L0002412 ,
L0002413	, L0002414	, L0002415 , L0002416 , L0002417 , L0002418 , L0002419 , L0002420 ,
L0002421	, L0002422	, L0002423 , L0002424 , L0002425 , L0002426 , L0002427 , L0002428 ,
L0002429	, L0002430	, L0002431 , L0002432 , L0002433 , L0002434 , L0002435 , L0002436 ,
L0002437	, L0002438	, L0002439 , L0002440 , L0002441 , L0002442 , L0002443 , L0002444 ,

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID -----	URBAN POP -----	SOURCE IDs -----
		L0002445 , L0002446 , L0002447 , L0002080 , L0002081 , L0002082 , L0002083 , L0002084 ,
		L0002085 , L0002086 , L0002087 , L0002088 , L0002089 , L0002090 , L0002091 , L0002092 ,
		L0002093 , L0002094 , L0002095 , L0002096 , L0002097 , L0002098 , L0002099 , L0002100 ,
		L0002101 , L0002102 , L0002103 , L0002104 , L0002105 , L0002106 , L0002107 , L0002108 ,
		L0002109 , L0002110 , L0002111 , L0002112 , L0002113 , L0002114 , L0002115 , L0002116 ,
		L0002117 , L0002118 , L0002119 , L0002120 , L0002121 , L0002122 , L0002123 , L0002124 ,
		L0002125 , L0002126 , L0002127 , L0002128 , L0002129 , L0002130 , L0002131 , L0002132 ,

PAREA1 ,

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	0.0,	0.0,	0.0,	0.0,	0.0,	2	0.0,	0.0,	0.0,	0.0,	0.0,
3	0.0,	0.0,	0.0,	0.0,	0.0,	4	0.0,	0.0,	0.0,	0.0,	0.0,
5	0.0,	0.0,	0.0,	0.0,	0.0,	6	0.0,	0.0,	0.0,	0.0,	0.0,
7	0.0,	0.0,	0.0,	0.0,	0.0,	8	0.0,	0.0,	0.0,	0.0,	0.0,
9	11.0,	115.5,	248.2,	20.3,	-61.1,	10	0.0,	0.0,	0.0,	0.0,	0.0,
11	0.0,	0.0,	0.0,	0.0,	0.0,	12	0.0,	0.0,	0.0,	0.0,	0.0,
13	0.0,	0.0,	0.0,	0.0,	0.0,	14	0.0,	0.0,	0.0,	0.0,	0.0,
15	0.0,	0.0,	0.0,	0.0,	0.0,	16	0.0,	0.0,	0.0,	0.0,	0.0,
17	0.0,	0.0,	0.0,	0.0,	0.0,	18	0.0,	0.0,	0.0,	0.0,	0.0,
19	0.0,	0.0,	0.0,	0.0,	0.0,	20	0.0,	0.0,	0.0,	0.0,	0.0,
21	0.0,	0.0,	0.0,	0.0,	0.0,	22	0.0,	0.0,	0.0,	0.0,	0.0,
23	0.0,	0.0,	0.0,	0.0,	0.0,	24	0.0,	0.0,	0.0,	0.0,	0.0,
25	0.0,	0.0,	0.0,	0.0,	0.0,	26	0.0,	0.0,	0.0,	0.0,	0.0,
27	11.0,	115.5,	248.2,	-268.6,	61.1,	28	11.0,	156.3,	255.0,	-279.8,	35.2,
29	11.0,	192.6,	259.2,	-287.8,	8.1,	30	11.0,	223.1,	255.7,	-287.1,	-19.2,
31	11.0,	246.8,	244.3,	-277.7,	-45.9,	32	11.0,	262.9,	225.5,	-259.8,	-71.3,
33	11.0,	271.1,	199.9,	-234.0,	-94.5,	34	11.0,	271.1,	168.1,	-201.1,	-114.8,
35	11.0,	262.8,	131.3,	-162.1,	-131.6,	36	0.0,	0.0,	0.0,	0.0,	0.0,

SOURCE ID: STCK2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	255.0,	156.3,	-105.8,	-92.9,	2	11.0,	259.2,	192.6,	-107.3,	-98.4,

3	11.0,	255.7,	223.1,	-105.5,	-100.9,	4	11.0,	244.3,	246.8,	-100.6,	-100.3,
5	11.0,	225.5,	262.9,	-92.5,	-96.7,	6	11.0,	199.9,	271.1,	-81.7,	-90.1,
7	11.0,	168.1,	271.1,	-68.4,	-80.8,	8	11.0,	131.3,	262.8,	-53.0,	-69.0,
9	11.0,	115.5,	248.2,	-36.8,	-43.3,	10	11.0,	156.3,	255.0,	-34.6,	-27.6,
11	11.0,	192.6,	259.2,	-31.2,	-11.0,	12	11.0,	223.1,	255.7,	-26.9,	6.0,
13	11.0,	246.8,	244.3,	-21.8,	22.8,	14	11.0,	262.9,	225.5,	-16.1,	38.9,
15	11.0,	271.1,	199.9,	-9.8,	53.8,	16	11.0,	271.1,	168.1,	-3.3,	67.1,
17	11.0,	262.8,	131.3,	3.4,	78.4,	18	11.0,	248.2,	115.5,	-14.4,	87.3,
19	11.0,	255.0,	156.3,	-50.5,	92.9,	20	11.0,	259.2,	192.6,	-85.3,	98.4,
21	11.0,	255.7,	223.1,	-117.5,	100.9,	22	11.0,	244.3,	246.8,	-146.2,	100.3,
23	11.0,	225.5,	262.9,	-170.4,	96.7,	24	11.0,	199.9,	271.1,	-189.4,	90.1,
25	11.0,	168.1,	271.1,	-202.7,	80.8,	26	11.0,	131.3,	262.8,	-209.8,	69.0,
27	11.0,	115.5,	248.2,	-211.4,	43.3,	28	11.0,	156.3,	255.0,	-220.4,	27.6,
29	11.0,	192.6,	259.2,	-228.0,	11.0,	30	11.0,	223.1,	255.7,	-228.7,	-6.0,
31	11.0,	246.8,	244.3,	-222.4,	-22.8,	32	11.0,	262.9,	225.5,	-209.4,	-38.9,
33	11.0,	271.1,	199.9,	-190.0,	-53.8,	34	11.0,	271.1,	168.1,	-164.9,	-67.1,
35	11.0,	262.8,	131.3,	-134.7,	-78.4,	36	11.0,	248.2,	115.5,	-101.1,	-87.3,

SOURCE ID: STCK3

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	255.0,	156.3,	-111.3,	-63.3,	2	11.0,	259.2,	192.6,	-117.9,	-70.2,
3	11.0,	255.7,	223.1,	-120.8,	-74.9,	4	11.0,	244.3,	246.8,	-120.2,	-77.4,
5	11.0,	225.5,	262.9,	-115.8,	-77.5,	6	11.0,	199.9,	271.1,	-108.0,	-75.3,
7	11.0,	168.1,	271.1,	-96.8,	-70.8,	8	11.0,	131.3,	262.8,	-82.8,	-64.1,
9	11.0,	115.5,	248.2,	-67.0,	-43.6,	10	11.0,	156.3,	255.0,	-64.2,	-33.1,
11	11.0,	192.6,	259.2,	-59.5,	-21.6,	12	11.0,	223.1,	255.7,	-52.9,	-9.3,
13	11.0,	246.8,	244.3,	-44.8,	3.2,	14	11.0,	262.9,	225.5,	-35.2,	15.6,
15	11.0,	271.1,	199.9,	-24.7,	27.6,	16	11.0,	271.1,	168.1,	-13.3,	38.7,
17	11.0,	262.8,	131.3,	-1.6,	48.6,	18	11.0,	248.2,	115.5,	-14.1,	57.1,
19	11.0,	255.0,	156.3,	-45.0,	63.3,	20	11.0,	259.2,	192.6,	-74.8,	70.2,
21	11.0,	255.7,	223.1,	-102.2,	74.9,	22	11.0,	244.3,	246.8,	-126.6,	77.4,
23	11.0,	225.5,	262.9,	-147.1,	77.5,	24	11.0,	199.9,	271.1,	-163.2,	75.3,
25	11.0,	168.1,	271.1,	-174.3,	70.8,	26	11.0,	131.3,	262.8,	-180.1,	64.1,
27	11.0,	115.5,	248.2,	-181.2,	43.6,	28	11.0,	156.3,	255.0,	-190.8,	33.1,
29	11.0,	192.6,	259.2,	-199.8,	21.6,	30	11.0,	223.1,	255.7,	-202.7,	9.3,
31	11.0,	246.8,	244.3,	-199.5,	-3.2,	32	11.0,	262.9,	225.5,	-190.2,	-15.6,
33	11.0,	271.1,	199.9,	-175.2,	-27.6,	34	11.0,	271.1,	168.1,	-154.8,	-38.7,
35	11.0,	262.8,	131.3,	-129.7,	-48.6,	36	11.0,	248.2,	115.5,	-101.3,	-57.1,

SOURCE ID: STCK4

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	255.0,	156.3,	-115.2,	-36.4,	2	11.0,	259.2,	192.6,	-126.4,	-44.3,
3	11.0,	255.7,	223.1,	-133.7,	-51.0,	4	11.0,	244.3,	246.8,	-137.0,	-56.0,
5	11.0,	225.5,	262.9,	-136.1,	-59.4,	6	11.0,	199.9,	271.1,	-131.1,	-61.0,
7	11.0,	168.1,	271.1,	-122.1,	-60.7,	8	11.0,	131.3,	262.8,	-109.3,	-58.5,
9	11.0,	115.5,	248.2,	-94.2,	-42.8,	10	11.0,	156.3,	255.0,	-91.1,	-37.0,
11	11.0,	192.6,	259.2,	-85.3,	-30.1,	12	11.0,	223.1,	255.7,	-76.9,	-22.2,
13	11.0,	246.8,	244.3,	-66.1,	-13.6,	14	11.0,	262.9,	225.5,	-53.3,	-4.6,
15	11.0,	271.1,	199.9,	-39.0,	4.5,	16	11.0,	271.1,	168.1,	-23.4,	13.5,
17	11.0,	262.8,	131.3,	-7.1,	22.1,	18	11.0,	248.2,	115.5,	-15.0,	30.0,
19	11.0,	255.0,	156.3,	-41.1,	36.4,	20	11.0,	259.2,	192.6,	-66.3,	44.3,
21	11.0,	255.7,	223.1,	-89.4,	51.0,	22	11.0,	244.3,	246.8,	-109.8,	56.0,

23	11.0,	225.5,	262.9,	-126.9,	59.4,	24	11.0,	199.9,	271.1,	-140.1,	61.0,
25	11.0,	168.1,	271.1,	-149.0,	60.7,	26	11.0,	131.3,	262.8,	-153.5,	58.5,
27	11.0,	115.5,	248.2,	-154.1,	42.8,	28	11.0,	156.3,	255.0,	-163.9,	37.0,
29	11.0,	192.6,	259.2,	-174.0,	30.1,	30	11.0,	223.1,	255.7,	-178.8,	22.2,
31	11.0,	246.8,	244.3,	-178.2,	13.6,	32	11.0,	262.9,	225.5,	-172.2,	4.6,
33	11.0,	271.1,	199.9,	-160.9,	-4.5,	34	11.0,	271.1,	168.1,	-144.7,	-13.5,
35	11.0,	262.8,	131.3,	-124.2,	-22.1,	36	11.0,	248.2,	115.5,	-100.5,	-30.0,

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

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*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK5

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	255.0,	156.3,	-125.1,	20.7,	2	11.0,	259.2,	192.6,	-146.1,	10.1,
3	11.0,	255.7,	223.1,	-162.6,	-0.7,	4	11.0,	244.3,	246.8,	-174.2,	-11.6,
5	11.0,	225.5,	262.9,	-180.4,	-22.1,	6	11.0,	199.9,	271.1,	-181.2,	-31.9,
7	11.0,	168.1,	271.1,	-176.5,	-40.8,	8	11.0,	131.3,	262.8,	-166.4,	-48.4,
9	11.0,	115.5,	248.2,	-152.1,	-42.7,	10	11.0,	156.3,	255.0,	-148.2,	-47.0,
11	11.0,	192.6,	259.2,	-139.8,	-49.8,	12	11.0,	223.1,	255.7,	-127.1,	-51.0,
13	11.0,	246.8,	244.3,	-110.6,	-50.8,	14	11.0,	262.9,	225.5,	-90.7,	-48.9,
15	11.0,	271.1,	199.9,	-68.0,	-45.6,	16	11.0,	271.1,	168.1,	-43.3,	-40.9,
17	11.0,	262.8,	131.3,	-17.3,	-35.0,	18	11.0,	248.2,	115.5,	-15.0,	-28.0,
19	11.0,	255.0,	156.3,	-31.2,	-20.7,	20	11.0,	259.2,	192.6,	-46.5,	-10.1,
21	11.0,	255.7,	223.1,	-60.5,	0.7,	22	11.0,	244.3,	246.8,	-72.6,	11.6,
23	11.0,	225.5,	262.9,	-82.5,	22.1,	24	11.0,	199.9,	271.1,	-89.9,	31.9,
25	11.0,	168.1,	271.1,	-94.6,	40.8,	26	11.0,	131.3,	262.8,	-96.4,	48.4,
27	11.0,	115.5,	248.2,	-96.1,	42.7,	28	11.0,	156.3,	255.0,	-106.8,	47.0,
29	11.0,	192.6,	259.2,	-119.5,	49.8,	30	11.0,	223.1,	255.7,	-128.6,	51.0,
31	11.0,	246.8,	244.3,	-133.7,	50.8,	32	11.0,	262.9,	225.5,	-134.8,	48.9,
33	11.0,	271.1,	199.9,	-131.8,	45.6,	34	11.0,	271.1,	168.1,	-124.8,	40.9,
35	11.0,	262.8,	131.3,	-114.0,	35.0,	36	11.0,	248.2,	115.5,	-100.4,	28.0,

SOURCE ID: STCK6

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	255.0,	156.3,	-130.3,	48.9,	2	11.0,	259.2,	192.6,	-156.0,	37.0,
3	11.0,	255.7,	223.1,	-177.1,	24.0,	4	11.0,	244.3,	246.8,	-192.7,	10.3,
5	11.0,	225.5,	262.9,	-202.5,	-3.8,	6	11.0,	199.9,	271.1,	-206.1,	-17.7,
7	11.0,	168.1,	271.1,	-203.5,	-31.1,	8	11.0,	131.3,	262.8,	-194.7,	-43.6,
9	11.0,	115.5,	248.2,	-180.8,	-42.8,	10	11.0,	156.3,	255.0,	-176.4,	-52.1,
11	11.0,	192.6,	259.2,	-166.6,	-59.7,	12	11.0,	223.1,	255.7,	-151.8,	-65.5,
13	11.0,	246.8,	244.3,	-132.4,	-69.3,	14	11.0,	262.9,	225.5,	-109.0,	-71.0,
15	11.0,	271.1,	199.9,	-82.2,	-70.5,	16	11.0,	271.1,	168.1,	-53.0,	-67.9,
17	11.0,	262.8,	131.3,	-22.1,	-63.2,	18	11.0,	248.2,	115.5,	-14.9,	-56.6,
19	11.0,	255.0,	156.3,	-26.0,	-48.9,	20	11.0,	259.2,	192.6,	-36.6,	-37.0,
21	11.0,	255.7,	223.1,	-46.0,	-24.0,	22	11.0,	244.3,	246.8,	-54.1,	-10.3,
23	11.0,	225.5,	262.9,	-60.5,	3.8,	24	11.0,	199.9,	271.1,	-65.0,	17.7,
25	11.0,	168.1,	271.1,	-67.6,	31.1,	26	11.0,	131.3,	262.8,	-68.2,	43.6,
27	11.0,	115.5,	248.2,	-67.5,	42.8,	28	11.0,	156.3,	255.0,	-78.6,	52.1,

29	11.0,	192.6,	259.2,	-92.6,	59.7,	30	11.0,	223.1,	255.7,	-103.8,	65.5,
31	11.0,	246.8,	244.3,	-111.9,	69.3,	32	11.0,	262.9,	225.5,	-116.5,	71.0,
33	11.0,	271.1,	199.9,	-117.6,	70.5,	34	11.0,	271.1,	168.1,	-115.2,	67.9,
35	11.0,	262.8,	131.3,	-109.2,	63.2,	36	11.0,	248.2,	115.5,	-100.6,	56.6,

SOURCE ID: STCK7

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	255.0,	156.3,	-135.1,	75.8,	2	11.0,	259.2,	192.6,	-165.4,	62.7,
3	11.0,	255.7,	223.1,	-190.7,	47.7,	4	11.0,	244.3,	246.8,	-210.3,	31.2,
5	11.0,	225.5,	262.9,	-223.4,	13.8,	6	11.0,	199.9,	271.1,	-229.8,	-4.1,
7	11.0,	168.1,	271.1,	-229.2,	-21.8,	8	11.0,	131.3,	262.8,	-221.6,	-38.8,
9	11.0,	115.5,	248.2,	-208.1,	-42.9,	10	11.0,	156.3,	255.0,	-203.3,	-56.9,
11	11.0,	192.6,	259.2,	-192.3,	-69.1,	12	11.0,	223.1,	255.7,	-175.5,	-79.2,
13	11.0,	246.8,	244.3,	-153.3,	-86.9,	14	11.0,	262.9,	225.5,	-126.5,	-92.0,
15	11.0,	271.1,	199.9,	-95.9,	-94.2,	16	11.0,	271.1,	168.1,	-62.3,	-93.6,
17	11.0,	262.8,	131.3,	-26.8,	-90.2,	18	11.0,	248.2,	115.5,	-14.9,	-84.0,
19	11.0,	255.0,	156.3,	-21.2,	-75.8,	20	11.0,	259.2,	192.6,	-27.2,	-62.7,
21	11.0,	255.7,	223.1,	-32.3,	-47.7,	22	11.0,	244.3,	246.8,	-36.5,	-31.2,
23	11.0,	225.5,	262.9,	-39.5,	-13.8,	24	11.0,	199.9,	271.1,	-41.3,	4.1,
25	11.0,	168.1,	271.1,	-41.9,	21.8,	26	11.0,	131.3,	262.8,	-41.2,	38.8,
27	11.0,	115.5,	248.2,	-40.1,	42.9,	28	11.0,	156.3,	255.0,	-51.7,	56.9,
29	11.0,	192.6,	259.2,	-66.9,	69.1,	30	11.0,	223.1,	255.7,	-80.2,	79.2,
31	11.0,	246.8,	244.3,	-91.0,	86.9,	32	11.0,	262.9,	225.5,	-99.0,	92.0,
33	11.0,	271.1,	199.9,	-104.0,	94.2,	34	11.0,	271.1,	168.1,	-105.8,	93.6,
35	11.0,	262.8,	131.3,	-104.5,	90.2,	36	11.0,	248.2,	115.5,	-100.6,	84.0,

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
 *** PAGE 22

*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
 (METERS)

376999.0, 377086.3, 377173.6, 377260.9, 377348.2, 377435.5, 377522.8, 377610.1, 377697.4, 377784.7,
 377872.0, 377959.3, 378046.6, 378133.9, 378221.2, 378308.5, 378395.8, 378483.1, 378570.4, 378657.7,
 378745.0,

*** Y-COORDINATES OF GRID ***
 (METERS)

3746986.6, 3747043.0, 3747099.4, 3747155.8, 3747212.2, 3747268.5, 3747324.9, 3747381.3, 3747437.7, 3747494.1,
 3747550.4, 3747606.8, 3747663.2, 3747719.6, 3747776.0, 3747832.3, 3747888.7, 3747945.1, 3748001.5, 3748057.9,
 3748114.2,

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
 *** PAGE 23

*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	376998.97	377086.27	377173.57	X-COORD (METERS)		377435.47	377522.77	377610.07	377697.37
3748114.24	18.30	18.50	19.10	19.90	20.30	20.10	19.80	19.60	19.40
3748057.86	25.50	18.60	18.90	19.10	19.50	19.60	19.70	19.70	19.60
3748001.48	19.20	25.90	25.00	19.80	20.00	20.80	20.10	19.90	20.10
3747945.10	18.10	19.60	25.20	26.60	23.40	22.60	20.00	20.10	20.10
3747888.72	18.30	18.60	21.80	20.80	23.70	25.60	21.70	19.80	19.80
3747832.34	18.40	18.70	20.00	20.80	20.80	20.60	23.60	23.50	19.90
3747775.96	18.40	18.70	19.50	21.00	20.70	19.90	19.90	19.80	22.80
3747719.58	18.60	19.10	19.80	20.70	20.80	20.50	20.30	19.90	19.20
3747663.20	18.50	18.80	19.20	20.20	20.50	20.70	19.80	19.70	19.20
3747606.82	18.50	18.70	19.10	19.40	20.00	20.40	19.70	19.60	19.30
3747550.44	18.40	18.50	18.60	18.50	19.80	20.20	19.70	19.70	19.60
3747494.06	18.40	18.40	18.30	18.20	19.90	20.20	19.60	19.80	19.80
3747437.68	18.70	18.60	18.40	18.50	19.20	19.90	19.90	20.00	19.80
3747381.30	18.90	18.50	18.20	18.60	19.00	19.60	20.40	20.20	19.60
3747324.92	19.30	18.60	18.00	18.30	18.90	19.30	20.40	19.70	19.60
3747268.54	18.90	18.50	18.00	17.80	18.50	19.30	19.60	19.50	19.20
3747212.16	19.20	19.10	18.40	18.20	19.50	20.00	20.00	19.20	18.50
3747155.78	19.50	19.50	19.60	19.70	22.00	21.80	21.10	21.90	19.80
3747099.40	18.90	18.80	19.90	20.20	21.90	21.80	21.40	21.90	21.30
3747043.02	18.60	18.40	20.30	20.10	20.70	20.70	20.90	20.80	21.30
3746986.64	19.40	18.30	20.10	19.90	13.80	13.50	20.90	20.60	20.70

▲ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
*** 08:41:54
*** PAGE 24

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	377784.67	377871.97	377959.27	X-COORD (METERS)		378221.17	378308.47	378395.77	378483.07
3748114.24	19.20	19.10	18.90	18.80	18.70	18.70	18.20	17.60	17.60
3748057.86	19.60	19.50	19.40	19.20	18.90	18.60	18.30	18.00	17.80
3748001.48	19.90	19.50	19.50	19.80	19.20	18.80	18.70	18.30	18.00
3747945.10	19.60	19.20	19.40	20.10	19.10	19.00	18.90	18.50	18.10
3747888.72	19.20	19.10	19.20	20.10	19.60	19.40	19.00	18.60	18.30
3747832.34	19.10	19.00	19.60	19.90	19.90	19.30	19.30	19.20	18.90
3747775.96	22.70	19.10	19.40	19.60	20.10	19.50	19.20	18.80	18.60
3747719.58	19.90	24.00	23.10	20.00	20.10	19.50	19.30	19.00	18.60
3747663.20	19.10	19.40	22.60	25.80	21.30	19.40	19.20	18.80	18.50
3747606.82	19.60	19.30	19.50	20.30	23.70	25.00	19.90	18.80	18.80
3747550.44	19.70	19.30	19.20	19.50	19.90	19.90	24.50	22.10	18.80
3747494.06	19.50	19.30	19.10	19.50	20.00	19.20	20.00	20.60	22.40

3747437.68	19.50	18.90	18.60	19.30	19.90	20.00	20.10	20.00	20.10
3747381.30	19.40	19.00	18.80	19.10	20.10	20.10	20.10	19.70	19.90
3747324.92	19.40	19.30	19.50	19.70	20.00	20.10	19.90	19.60	19.70
3747268.54	19.10	18.90	19.60	19.70	20.00	20.10	19.80	19.40	19.60
3747212.16	18.10	18.70	19.30	19.70	20.20	20.10	19.80	19.50	19.10
3747155.78	17.40	22.30	22.60	23.40	20.30	20.40	20.40	20.90	20.10
3747099.40	17.60	20.00	20.30	23.20	20.10	20.50	20.60	20.10	20.00
3747043.02	17.70	17.40	18.60	23.30	19.60	20.00	19.80	20.30	20.40
3746986.64	17.60	16.20	19.00	22.70	19.60	19.70	20.00	19.90	20.50

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	378570.37	378657.67	378744.97	X-COORD (METERS)
3748114.24	16.40	16.00	16.70	
3748057.86	17.10	17.30	17.10	
3748001.48	17.70	17.20	17.20	
3747945.10	17.60	17.40	17.40	
3747888.72	18.10	17.40	17.50	
3747832.34	17.90	17.50	17.40	
3747775.96	17.90	17.60	17.30	
3747719.58	18.00	17.70	17.50	
3747663.20	18.10	17.70	17.80	
3747606.82	18.20	17.80	17.90	
3747550.44	18.20	18.00	17.90	
3747494.06	19.90	18.50	18.30	
3747437.68	21.40	22.40	20.70	
3747381.30	20.10	21.00	22.10	
3747324.92	19.80	19.20	18.50	
3747268.54	19.20	19.00	18.70	
3747212.16	18.80	18.60	18.40	
3747155.78	19.20	19.40	19.10	
3747099.40	18.90	19.30	19.00	
3747043.02	19.20	19.20	18.60	
3746986.64	20.00	20.00	18.90	

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	376998.97	377086.27	377173.57	377260.87	377348.17	377435.47	377522.77	377610.07	377697.37
---------------------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

3748114.24	25.50	18.50	19.10	19.90	20.30	20.10	19.80	19.60	19.40
3748057.86	25.50	26.00	26.20	19.10	19.50	19.60	19.70	19.70	19.60
3748001.48	25.70	25.90	26.20	26.60	20.00	20.80	20.10	19.90	20.10
3747945.10	25.50	26.20	25.20	26.60	26.50	22.60	20.00	20.10	20.10
3747888.72	18.30	24.40	21.80	26.60	26.50	25.60	24.80	19.80	19.80
3747832.34	18.40	18.70	20.00	20.80	20.80	25.50	23.60	23.50	19.90
3747775.96	18.40	18.70	19.50	21.00	20.70	19.90	19.90	23.50	22.80
3747719.58	18.60	19.10	19.80	20.70	20.80	20.50	20.30	19.90	19.20
3747663.20	18.50	18.80	19.20	20.20	20.50	20.70	19.80	19.70	19.20
3747606.82	18.50	18.70	19.10	19.40	20.00	20.40	19.70	19.60	19.30
3747550.44	18.40	18.50	18.60	18.50	19.80	20.20	19.70	19.70	19.60
3747494.06	18.40	18.40	18.30	18.20	19.90	20.20	19.60	19.80	19.80
3747437.68	18.70	18.60	18.40	18.50	19.20	19.90	19.90	20.00	19.80
3747381.30	18.90	18.50	18.20	18.60	19.00	19.60	20.40	20.20	19.60
3747324.92	19.30	18.60	18.00	18.30	18.90	19.30	20.40	19.70	19.60
3747268.54	18.90	18.50	18.00	17.80	18.50	19.30	19.60	19.50	19.20
3747212.16	19.20	19.10	18.40	18.20	19.50	20.00	20.00	19.20	18.50
3747155.78	19.50	19.50	19.60	19.70	22.00	21.80	21.10	21.90	19.80
3747099.40	18.90	18.80	19.90	20.20	21.90	21.80	21.40	21.90	21.30
3747043.02	18.60	18.40	20.30	20.10	20.70	20.70	20.90	20.80	21.30
3746986.64	19.40	18.30	20.10	19.90	20.60	21.70	20.90	20.60	20.70

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	377784.67	377871.97	377959.27	378046.57	378133.87	378221.17	378308.47	378395.77	378483.07
3748114.24	19.20	19.10	18.90	18.80	18.70	18.70	18.20	17.60	17.60
3748057.86	19.60	19.50	19.40	19.20	18.90	18.60	18.30	18.00	17.80
3748001.48	19.90	19.50	19.50	19.80	19.20	18.80	18.70	18.30	18.00
3747945.10	19.60	19.20	19.40	20.10	19.10	19.00	18.90	18.50	18.10
3747888.72	19.20	19.10	19.20	20.10	19.60	19.40	19.00	18.60	18.30
3747832.34	19.10	19.00	19.60	19.90	19.90	19.30	19.30	19.20	18.90
3747775.96	23.10	24.00	19.40	19.60	20.10	19.50	19.20	18.80	18.60
3747719.58	23.40	24.00	24.90	26.00	20.10	19.50	19.30	19.00	18.60
3747663.20	19.10	24.50	25.30	25.80	24.70	25.90	19.20	18.80	18.50
3747606.82	19.60	19.30	19.50	26.20	26.20	25.00	25.10	18.80	18.80
3747550.44	19.70	19.30	19.20	19.50	25.50	25.80	24.50	22.10	22.20
3747494.06	19.50	19.30	19.10	19.50	20.00	19.20	20.00	23.90	22.40
3747437.68	19.50	18.90	18.60	19.30	19.90	20.00	20.10	20.00	20.10
3747381.30	19.40	19.00	18.80	19.10	20.10	20.10	20.10	19.70	19.90
3747324.92	19.40	19.30	19.50	19.70	20.00	20.10	19.90	19.60	19.70
3747268.54	19.10	18.90	19.60	19.70	20.00	20.10	19.80	19.40	19.60
3747212.16	18.10	24.50	19.30	22.80	20.20	20.10	19.80	19.50	19.10
3747155.78	24.30	24.50	22.60	23.40	20.30	20.40	20.40	20.90	20.10

3747099.40		24.30	24.30	20.30	23.20	20.10	20.50	20.60	20.10	20.00
3747043.02		24.30	17.40	18.60	23.30	19.60	20.00	19.80	20.30	20.40
3746986.64		22.90	21.40	19.00	22.70	19.60	19.70	20.00	19.90	20.50

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3 *** 07/29/25
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027 *** 08:41:54
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD		X-COORD (METERS)		
(METERS)		378570.37	378657.67	378744.97

3748114.24		16.40	16.00	16.70
3748057.86		17.10	17.30	17.10
3748001.48		17.70	17.20	17.20
3747945.10		17.60	17.40	17.40
3747888.72		18.10	17.40	17.50
3747832.34		17.90	17.50	17.40
3747775.96		17.90	17.60	17.30
3747719.58		18.00	17.70	17.50
3747663.20		18.10	17.70	17.80
3747606.82		18.20	17.80	17.90
3747550.44		18.20	18.00	17.90
3747494.06		19.90	18.50	18.30
3747437.68		21.40	22.40	23.30
3747381.30		20.10	21.00	24.00
3747324.92		19.80	19.20	18.50
3747268.54		19.20	19.00	18.70
3747212.16		18.80	18.60	18.40
3747155.78		19.20	19.40	19.10
3747099.40		18.90	19.30	19.00
3747043.02		19.20	19.20	18.60
3746986.64		20.00	20.00	18.90

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3 *** 07/29/25
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027 *** 08:41:54
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
 (METERS)

(377146.6, 3747291.4,	18.2,	18.2,	0.0);	(377230.5, 3747442.5,	18.1,	18.1,	0.0);
(377253.4, 3747498.1,	18.2,	18.2,	0.0);	(377259.3, 3747543.7,	18.5,	18.5,	0.0);
(377259.3, 3747621.9,	19.6,	19.6,	0.0);	(377260.6, 3747704.7,	20.6,	20.6,	0.0);
(378132.2, 3747267.4,	20.0,	20.0,	0.0);	(378294.5, 3747265.7,	19.8,	19.8,	0.0);

^ *** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3 *** 07/29/25
 *** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027 *** 08:41:54
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
 LESS THAN 1.0 METER; WITHIN OPENPIT; OR BEYOND 80KM FOR FASTAREA/FASTALL

		SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS) YR (METERS)	DISTANCE (METERS)	
		L0002199	377260.9 3747437.7	-4.03	
		L0002130	377610.1 3747268.5	-3.14	
		L0002131	377610.1 3747268.5	-3.26	
▲	*** AERMOD - VERSION 23132	***	*** 190th St Warehouse V3	***	07/29/25
	*** AERMET - VERSION 22112	***	*** DPM concentrations for OY 2027	***	08:41:54
	*** MODELOPTs:	RegDEFAULT	CONC ELEV URBAN ADJ U*		PAGE 31

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

[illegible]

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

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1.54, 3.09, 5.14, 8.23, 10.80,
*** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3 *** 07/29/25
*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027 *** 08:41:54
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ U* *** PAGE 32

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*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

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Surface file:  E:\New MET data\khhr_sfc_pfl\KHHHR_V11_trimmed.sfc           Met Version:  22112
Profile file:  E:\New MET data\khhr_sfc_pfl\KHHHR_V11_trimmed.pfl
Surface format: FREE
Profile format: FREE
Surface station no.:      3167                Upper air station no.:      3190
              Name: UNKNOWN                      Name: UNKNOWN
              Year:  2016                        Year:  2016

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First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
----	----	----	-----	----	----	----	----	-------	-------	-------	-----	-----	----	-------	--------	-----	----	----	----	-----	----	----

16 01 01	1 01	-10.3	0.136	-9.000	-9.000	-999.	120.	22.1	0.21	1.29	1.00	1.31	333.	7.9	282.0	2.0
16 01 01	1 02	-10.1	0.135	-9.000	-9.000	-999.	119.	21.9	0.21	1.29	1.00	1.30	344.	7.9	281.4	2.0
16 01 01	1 03	-9.3	0.129	-9.000	-9.000	-999.	111.	20.9	0.21	1.29	1.00	1.25	352.	7.9	281.4	2.0
16 01 01	1 04	-10.6	0.138	-9.000	-9.000	-999.	123.	22.5	0.21	1.29	1.00	1.33	358.	7.9	280.9	2.0
16 01 01	1 05	-10.4	0.136	-9.000	-9.000	-999.	121.	22.2	0.22	1.29	1.00	1.30	322.	7.9	280.3	2.0
16 01 01	1 06	-13.4	0.156	-9.000	-9.000	-999.	148.	26.8	0.22	1.29	1.00	1.47	325.	7.9	280.9	2.0
16 01 01	1 07	-9.7	0.132	-9.000	-9.000	-999.	115.	21.4	0.22	1.29	1.00	1.26	329.	7.9	280.3	2.0
16 01 01	1 08	-16.4	0.202	-9.000	-9.000	-999.	218.	45.6	0.22	1.29	0.55	1.84	15.	7.9	281.4	2.0
16 01 01	1 09	26.9	0.246	0.362	0.005	64.	293.	-50.4	0.22	1.29	0.32	1.97	24.	7.9	284.2	2.0
16 01 01	1 10	82.3	0.301	0.834	0.005	256.	396.	-30.1	0.23	1.29	0.24	2.28	36.	7.9	286.4	2.0
16 01 01	1 11	121.4	0.322	1.193	0.005	509.	439.	-25.0	0.23	1.29	0.21	2.39	42.	7.9	288.8	2.0
16 01 01	1 12	141.1	0.291	1.349	0.005	633.	376.	-15.8	0.23	1.29	0.20	2.04	38.	7.9	290.3	2.0
16 01 01	1 13	140.5	0.248	1.576	0.005	1012.	298.	-9.9	0.29	1.29	0.20	1.50	66.	7.9	291.4	2.0
16 01 01	1 14	119.4	0.218	1.605	0.010	1258.	245.	-7.9	0.23	1.29	0.21	1.38	52.	7.9	291.4	2.0
16 01 01	1 15	79.4	0.146	1.444	0.011	1376.	135.	-3.5	0.05	1.29	0.24	1.33	103.	7.9	292.0	2.0
16 01 01	1 16	23.2	0.190	0.963	0.012	1392.	199.	-26.9	0.22	1.29	0.33	1.45	321.	7.9	291.4	2.0
16 01 01	1 17	-18.8	0.217	-9.000	-9.000	-999.	242.	51.7	0.05	1.29	0.59	2.89	249.	7.9	288.8	2.0
16 01 01	1 18	-20.1	0.203	-9.000	-9.000	-999.	219.	45.2	0.24	1.29	1.00	1.82	284.	7.9	287.0	2.0
16 01 01	1 19	-12.0	0.148	-9.000	-9.000	-999.	137.	24.5	0.22	1.29	1.00	1.40	310.	7.9	286.4	2.0
16 01 01	1 20	-9.7	0.133	-9.000	-9.000	-999.	116.	21.7	0.21	1.29	1.00	1.28	333.	7.9	285.9	2.0
16 01 01	1 21	-8.5	0.124	-9.000	-9.000	-999.	104.	20.1	0.21	1.29	1.00	1.20	337.	7.9	285.9	2.0
16 01 01	1 22	-6.7	0.110	-9.000	-9.000	-999.	87.	17.8	0.22	1.29	1.00	1.06	328.	7.9	285.9	2.0
16 01 01	1 23	-9.7	0.132	-9.000	-9.000	-999.	116.	21.7	0.21	1.29	1.00	1.28	344.	7.9	285.3	2.0
16 01 01	1 24	-10.5	0.138	-9.000	-9.000	-999.	123.	22.6	0.22	1.29	1.00	1.31	327.	7.9	285.3	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
16	01	01	01	7.9	1	333.	1.31	282.1	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** AERMOD - VERSION 23132 *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): STCK1 , STCK2 , STCK3 , STCK4 , STCK5 ,
 STCK6 , STCK7 , STCK8 , L0002133 , L0002134 , L0002135 , L0002136 , L0002137 ,
 L0002138 , L0002139 , L0002140 , L0002141 , L0002142 , L0002143 , L0002144 , L0002145 ,
 L0002146 , L0002147 , L0002148 , L0002149 , L0002150 , L0002151 , L0002152 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF DPM IN MICROGRAMS/M**3 **

Y-COORD (METERS)	376998.97	377086.27	377173.57	377260.87	377348.17	377435.47	377522.77	377610.07	377697.37
3748114.24	0.00019	0.00021	0.00022	0.00023	0.00024	0.00025	0.00026	0.00027	0.00026
3748057.86	0.00019	0.00023	0.00025	0.00027	0.00028	0.00030	0.00031	0.00031	0.00031
3748001.48	0.00024	0.00023	0.00026	0.00032	0.00033	0.00034	0.00036	0.00036	0.00036

3747945.10	0.00027	0.00031	0.00030	0.00031	0.00037	0.00039	0.00043	0.00043	0.00042
3747888.72	0.00031	0.00036	0.00039	0.00045	0.00045	0.00044	0.00051	0.00052	0.00051
3747832.34	0.00036	0.00042	0.00049	0.00058	0.00062	0.00063	0.00060	0.00060	0.00061
3747775.96	0.00043	0.00049	0.00059	0.00074	0.00079	0.00080	0.00081	0.00080	0.00073
3747719.58	0.00052	0.00060	0.00071	0.00091	0.00100	0.00102	0.00104	0.00103	0.00099
3747663.20	0.00066	0.00075	0.00089	0.00115	0.00129	0.00135	0.00140	0.00139	0.00136
3747606.82	0.00085	0.00098	0.00117	0.00151	0.00177	0.00192	0.00201	0.00203	0.00204
3747550.44	0.00108	0.00132	0.00162	0.00212	0.00264	0.00305	0.00330	0.00338	0.00333
3747494.06	0.00133	0.00174	0.00235	0.00341	0.00487	0.00599	0.00676	0.00653	0.00565
3747437.68	0.00150	0.00209	0.00318	0.00622	0.02201	0.02767	0.02255	0.01759	0.00866
3747381.30	0.00154	0.00222	0.00358	0.00781	0.03412	0.04381	0.04659	0.02748	0.01015
3747324.92	0.00148	0.00216	0.00360	0.00819	0.03548	0.04522	0.04756	0.02801	0.00982
3747268.54	0.00148	0.00210	0.00336	0.00715	0.03172	0.03948	0.04007	0.02257	0.00809
3747212.16	0.00133	0.00188	0.00288	0.00510	0.00993	0.01237	0.01239	0.00915	0.00525
3747155.78	0.00119	0.00167	0.00245	0.00378	0.00560	0.00683	0.00679	0.00546	0.00379
3747099.40	0.00111	0.00151	0.00210	0.00293	0.00390	0.00458	0.00458	0.00388	0.00294
3747043.02	0.00103	0.00135	0.00178	0.00233	0.00294	0.00336	0.00337	0.00296	0.00237
3746986.64	0.00094	0.00120	0.00152	0.00190	0.00226	0.00253	0.00260	0.00235	0.00195

*** AERMOD - VERSION 23132 *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
 *** PAGE 34

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): STCK1 , STCK2 , STCK3 , STCK4 , STCK5 ,
 STCK6 , STCK7 , STCK8 , L0002133 , L0002134 , L0002135 , L0002136 , L0002137 ,
 L0002138 , L0002139 , L0002140 , L0002141 , L0002142 , L0002143 , L0002144 , L0002145 ,
 L0002146 , L0002147 , L0002148 , L0002149 , L0002150 , L0002151 , L0002152 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF DPM IN MICROGRAMS/M**3 **

Y-COORD (METERS)	377784.67	377871.97	377959.27	378046.57	378133.87	378221.17	378308.47	378395.77	378483.07
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3748114.24	0.00026	0.00025	0.00023	0.00022	0.00022	0.00021	0.00022	0.00023	0.00024
3748057.86	0.00030	0.00028	0.00026	0.00025	0.00025	0.00025	0.00026	0.00028	0.00029
3748001.48	0.00034	0.00032	0.00030	0.00029	0.00030	0.00031	0.00032	0.00034	0.00036
3747945.10	0.00040	0.00038	0.00036	0.00035	0.00036	0.00038	0.00040	0.00042	0.00043
3747888.72	0.00048	0.00045	0.00044	0.00044	0.00046	0.00049	0.00051	0.00051	0.00051
3747832.34	0.00058	0.00056	0.00056	0.00057	0.00060	0.00062	0.00063	0.00062	0.00059
3747775.96	0.00070	0.00072	0.00074	0.00077	0.00078	0.00078	0.00076	0.00072	0.00067
3747719.58	0.00097	0.00095	0.00099	0.00103	0.00101	0.00096	0.00089	0.00081	0.00074
3747663.20	0.00137	0.00141	0.00139	0.00133	0.00125	0.00113	0.00100	0.00089	0.00079
3747606.82	0.00206	0.00203	0.00189	0.00168	0.00146	0.00126	0.00109	0.00094	0.00081
3747550.44	0.00316	0.00280	0.00237	0.00197	0.00163	0.00135	0.00113	0.00097	0.00082
3747494.06	0.00453	0.00353	0.00274	0.00215	0.00171	0.00138	0.00114	0.00096	0.00082
3747437.68	0.00565	0.00397	0.00290	0.00219	0.00170	0.00136	0.00111	0.00093	0.00079
3747381.30	0.00601	0.00398	0.00282	0.00209	0.00162	0.00129	0.00106	0.00089	0.00076
3747324.92	0.00556	0.00362	0.00257	0.00193	0.00151	0.00123	0.00102	0.00087	0.00076
3747268.54	0.00466	0.00322	0.00242	0.00191	0.00156	0.00132	0.00115	0.00102	0.00092
3747212.16	0.00348	0.00255	0.00198	0.00158	0.00131	0.00111	0.00096	0.00084	0.00076

3747155.78	0.00267	0.00201	0.00158	0.00128	0.00105	0.00088	0.00075	0.00066	0.00058
3747099.40	0.00219	0.00169	0.00135	0.00110	0.00091	0.00077	0.00066	0.00058	0.00051
3747043.02	0.00183	0.00144	0.00117	0.00097	0.00081	0.00069	0.00060	0.00053	0.00047
3746986.64	0.00156	0.00125	0.00102	0.00086	0.00072	0.00062	0.00055	0.00048	0.00043

*** AERMOD - VERSION 23132 *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
 *** PAGE 35

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): STCK1 , STCK2 , STCK3 , STCK4 , STCK5 ,
 STCK6 , STCK7 , STCK8 , L0002133 , L0002134 , L0002135 , L0002136 , L0002137 ,
 L0002138 , L0002139 , L0002140 , L0002141 , L0002142 , L0002143 , L0002144 , L0002145 ,
 L0002146 , L0002147 , L0002148 , L0002149 , L0002150 , L0002151 , L0002152 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF DPM IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)		
378570.37	378657.67	378744.97	

3748114.24	0.00026	0.00027	0.00028
3748057.86	0.00031	0.00032	0.00032
3748001.48	0.00037	0.00037	0.00037
3747945.10	0.00043	0.00043	0.00041
3747888.72	0.00050	0.00048	0.00046
3747832.34	0.00056	0.00053	0.00049
3747775.96	0.00062	0.00057	0.00052
3747719.58	0.00067	0.00060	0.00054
3747663.20	0.00070	0.00062	0.00055
3747606.82	0.00071	0.00062	0.00055
3747550.44	0.00071	0.00062	0.00055
3747494.06	0.00070	0.00061	0.00053
3747437.68	0.00068	0.00060	0.00052
3747381.30	0.00066	0.00058	0.00051
3747324.92	0.00067	0.00059	0.00051
3747268.54	0.00084	0.00077	0.00067
3747212.16	0.00069	0.00062	0.00054
3747155.78	0.00052	0.00046	0.00041
3747099.40	0.00045	0.00041	0.00036
3747043.02	0.00042	0.00037	0.00034
3746986.64	0.00039	0.00035	0.00031

*** AERMOD - VERSION 23132 *** 190th St Warehouse V3
 *** AERMET - VERSION 22112 *** DPM concentrations for OY 2027

*** 07/29/25
 *** 08:41:54
 *** PAGE 36

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): STCK1 , STCK2 , STCK3 , STCK4 , STCK5 ,
 STCK6 , STCK7 , STCK8 , L0002133 , L0002134 , L0002135 , L0002136 , L0002137 ,
 L0002138 , L0002139 , L0002140 , L0002141 , L0002142 , L0002143 , L0002144 , L0002145 ,
 L0002146 , L0002147 , L0002148 , L0002149 , L0002150 , L0002151 , L0002152 , . . . ,

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** CONC OF DPM          IN MICROGRAMS/M**3          **

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*** AERMOD - VERSION 23132 *** *** 190th St Warehouse V3 *** 07/29/25
*** AERMET - VERSION 22112 *** *** DPM concentrations for OY 2027 *** 08:41:54

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*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

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*** RECEPTOR TYPES:  GC = GRIDCART
                        GP = GRIDPOLR
                        DC = DISCCART
                        DP = DISCPOLR
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*** Message Summary : AERMOD Model Execution ***

Apx-156

A Total of 43848 Hours Were Processed

A Total of 888 Calm Hours Identified

A Total of 534 Missing Hours Identified (1.22 Percent)

***** FATAL ERROR MESSAGES *****

*** NONE ***

***** WARNING MESSAGES *****

SO W320	527	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	528	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	529	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	530	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	531	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	532	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	533	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
SO W320	534	PPARM: Input Parameter May Be Out-of-Range for Parameter	VS
ME W186	1223	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used	0.50
ME W187	1223	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
MX W450	26305	CHKDAT: Record Out of Sequence in Meteorological File at:	20010101
MX W450	26305	CHKDAT: Record Out of Sequence in Meteorological File at:	1 year gap

*** AERMOD Finishes Successfully ***

calendar_y	season	mcsub_area	vehicle_class	fuel	temperature	relative_humidity	process	speed_time	pollutant	emission_rate
2027	Annual	Los Angeles (SC)	MHDT	Dsl			IDLEX		PM2_5	0.015099
2027	Annual	Los Angeles (SC)	MHDT	Dsl			IDLEX		PM10	0.015781
2027	Annual	Los Angeles (SC)	MHDT	Dsl			IDLEX		CH4	0.024944
2027	Annual	Los Angeles (SC)	MHDT	Dsl			IDLEX		CO2	6037.361
2027	Annual	Los Angeles (SC)	MHDT	Dsl			IDLEX		ROG	0.537032
2027	Annual	Los Angeles (SC)	MHDT	Dsl			IDLEX		TOG	0.61137
2027	Annual	Los Angeles (SC)	MHDT	Dsl			IDLEX		PM	0.015876
2027	Annual	Los Angeles (SC)	MHDT	Dsl			IDLEX		SOx	0.019968
2027	Annual	Los Angeles (SC)	MHDT	Dsl			IDLEX		NOx	19.93896
2027	Annual	Los Angeles (SC)	MHDT	Dsl			IDLEX		CO	20.81086
2027	Annual	Los Angeles (SC)	MHDT	Dsl			IDLEX		HC	0.424062
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	35	PM2_5	0.002502
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	35	PM10	0.002615
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	35	CH4	0.000369
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	35	CO2	1028.89
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	35	ROG	0.007939
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	35	TOG	0.009038
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	35	PM	0.002631
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	35	SOx	0.003403
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	35	NOx	0.527301
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	35	CO	0.055351
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	35	HC	0.006269
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	10	PM2_5	0.005875
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	10	PM10	0.006141
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	10	CH4	0.00278
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	10	CO2	1940.102
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	10	ROG	0.059847
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	10	TOG	0.068132
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	10	PM	0.006178
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	10	SOx	0.006417
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	10	NOx	1.235912
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	10	CO	0.224953
2027	Annual	Los Angeles (SC)	MHDT	Dsl	66	60	RUNEX	10	HC	0.047258
2027	Annual	Los Angeles (SC)	LHDT2	Dsl			IDLEX		PM2_5	0.768371
2027	Annual	Los Angeles (SC)	LHDT2	Dsl			IDLEX		PM10	0.803113
2027	Annual	Los Angeles (SC)	LHDT2	Dsl			IDLEX		CH4	0.147383
2027	Annual	Los Angeles (SC)	LHDT2	Dsl			IDLEX		CO2	5534.714
2027	Annual	Los Angeles (SC)	LHDT2	Dsl			IDLEX		ROG	3.173065
2027	Annual	Los Angeles (SC)	LHDT2	Dsl			IDLEX		TOG	3.612324
2027	Annual	Los Angeles (SC)	LHDT2	Dsl			IDLEX		PM	0.807961
2027	Annual	Los Angeles (SC)	LHDT2	Dsl			IDLEX		SOx	0.018312
2027	Annual	Los Angeles (SC)	LHDT2	Dsl			IDLEX		NOx	35.18762
2027	Annual	Los Angeles (SC)	LHDT2	Dsl			IDLEX		CO	26.3
2027	Annual	Los Angeles (SC)	LHDT2	Dsl			IDLEX		HC	2.5056
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	35	PM2_5	0.013557
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	35	PM10	0.01417
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	35	CH4	0.00415
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	35	CO2	566.152
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	35	ROG	0.08935
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	35	TOG	0.10172
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	35	PM	0.014255
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	35	SOx	0.001873
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	35	NOx	0.391093
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	35	CO	0.153861
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	35	HC	0.070555
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	10	PM2_5	0.031333
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	10	PM10	0.03275
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	10	CH4	0.008207
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	10	CO2	1117.638
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	10	ROG	0.176702
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	10	TOG	0.201163
2027	Annual	Los Angeles (SC)	LHDT2	Dsl	66	60	RUNEX	10	PM	0.032948

2027 Annual	Los Angeles (SC)	LHDT2	Dsl	66	60 RUNEX	10 SOx	0.003698
2027 Annual	Los Angeles (SC)	LHDT2	Dsl	66	60 RUNEX	10 NOx	0.64948
2027 Annual	Los Angeles (SC)	LHDT2	Dsl	66	60 RUNEX	10 CO	0.470224
2027 Annual	Los Angeles (SC)	LHDT2	Dsl	66	60 RUNEX	10 HC	0.139532
2027 Annual	Los Angeles (SC)	HHDT	Dsl		IDLEX	PM2_5	0.00745
2027 Annual	Los Angeles (SC)	HHDT	Dsl		IDLEX	PM10	0.007787
2027 Annual	Los Angeles (SC)	HHDT	Dsl		IDLEX	CH4	0.109533
2027 Annual	Los Angeles (SC)	HHDT	Dsl		IDLEX	CO2	5144.329
2027 Annual	Los Angeles (SC)	HHDT	Dsl		IDLEX	ROG	2.35822
2027 Annual	Los Angeles (SC)	HHDT	Dsl		IDLEX	TOG	2.684654
2027 Annual	Los Angeles (SC)	HHDT	Dsl		IDLEX	PM	0.007834
2027 Annual	Los Angeles (SC)	HHDT	Dsl		IDLEX	SOx	0.017014
2027 Annual	Los Angeles (SC)	HHDT	Dsl		IDLEX	NOx	12.58847
2027 Annual	Los Angeles (SC)	HHDT	Dsl		IDLEX	CO	34.60589
2027 Annual	Los Angeles (SC)	HHDT	Dsl		IDLEX	HC	1.862145
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	35 PM2_5	0.004161
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	35 PM10	0.00435
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	35 CH4	0.000484
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	35 CO2	1426.576
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	35 ROG	0.010421
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	35 TOG	0.011864
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	35 PM	0.004376
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	35 SOx	0.004718
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	35 NOx	1.093533
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	35 CO	0.108298
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	35 HC	0.008229
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	10 PM2_5	0.006476
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	10 PM10	0.006769
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	10 CH4	0.003232
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	10 CO2	2412.536
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	10 ROG	0.069579
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	10 TOG	0.07921
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	10 PM	0.00681
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	10 SOx	0.007979
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	10 NOx	2.746123
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	10 CO	0.605284
2027 Annual	Los Angeles (SC)	HHDT	Dsl	66	60 RUNEX	10 HC	0.054942



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