190TH STREET WAREHOUSE PROJECT CONSTRUCTION HEALTH RISK ASSESSMENT ANALYSIS

City of Torrance
September 8, 2022
(Updated August 18, 2025)

ganddini

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

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prepared by
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Project No. 19260

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EXECUTIVE SUMMARY

The purpose of this health risk assessment analysis is to provide an assessment of the impacts resulting from the construction of the proposed 190th Street Warehouse project and to identify measures that may be necessary to reduce potentially significant impacts.

Cancer and Non-Cancer-Related Health Risk Impacts

The analysis contained in this report shows 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 one 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.

1. INTRODUCTION AND SETTING

This section describes the purpose of this health risk assessment, 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 cancer and non-cancer risk from construction-related diesel emissions. The original Construction HRA was conducted in September 2022 in the interest of completeness and to respond to CARB comments. However, as the site plan was updated (Scheme 17, dated 12.16.2024) reducing the size of the project from the original (Option A) 284,130 square feet (SF) of building space with 600 on-site parking spaces down to 262,970 SF of building space with 552 on-site parking spaces with an additional ~0.57 acres of parking along Crenshaw Place, this HRA was also updated to include the construction-related emissions due to the changes to the project. The objectives of the study include:

- discussion of the cancer risk thresholds of significance
- analysis of the construction-related cancer risk from diesel emissions
- recommendations for mitigation measures

The City of Torrance is the lead agency for this health risk assessment, 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, a definition of terms has been provided in Appendix A.

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.

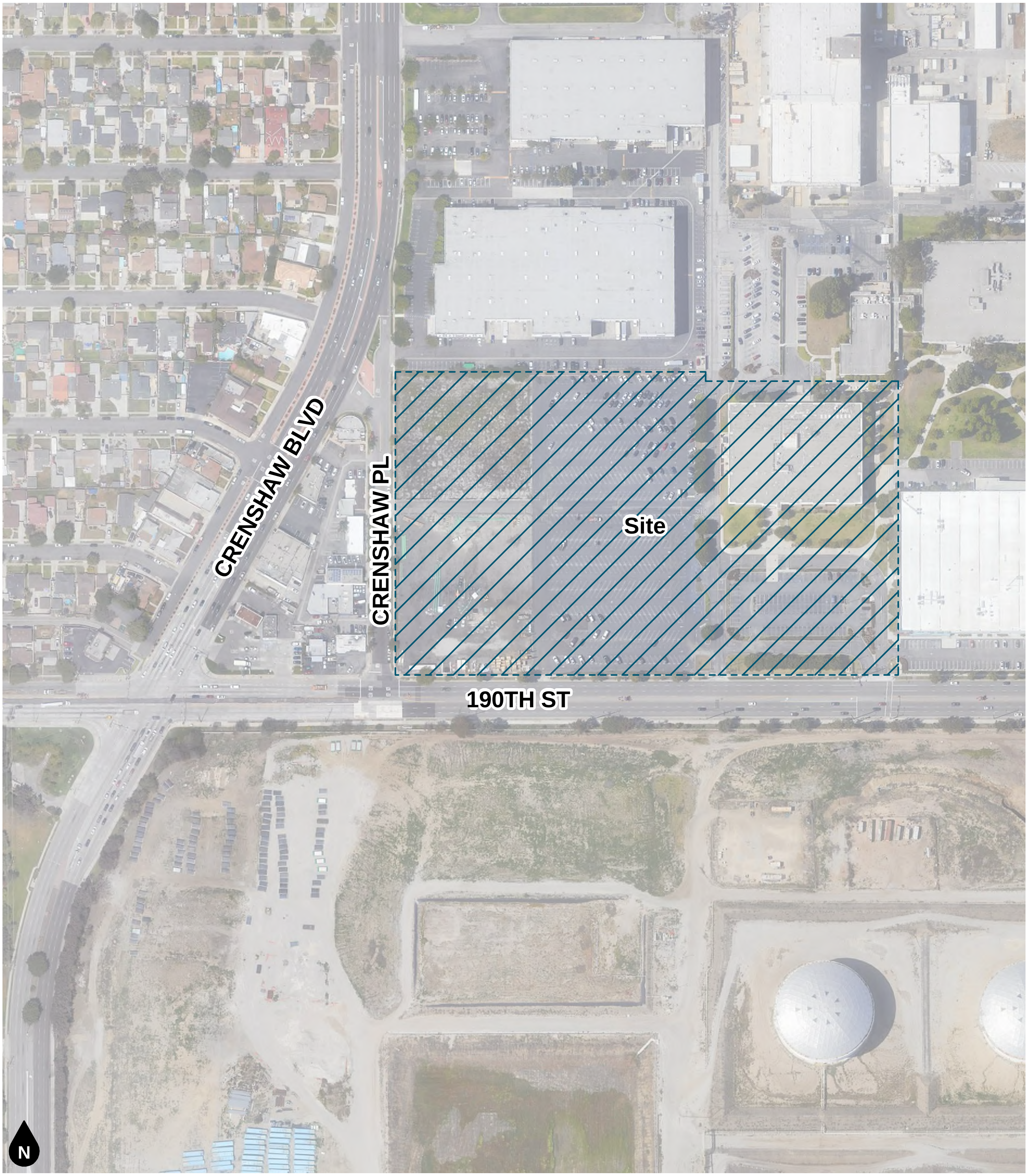


Figure 1
Project Location Map

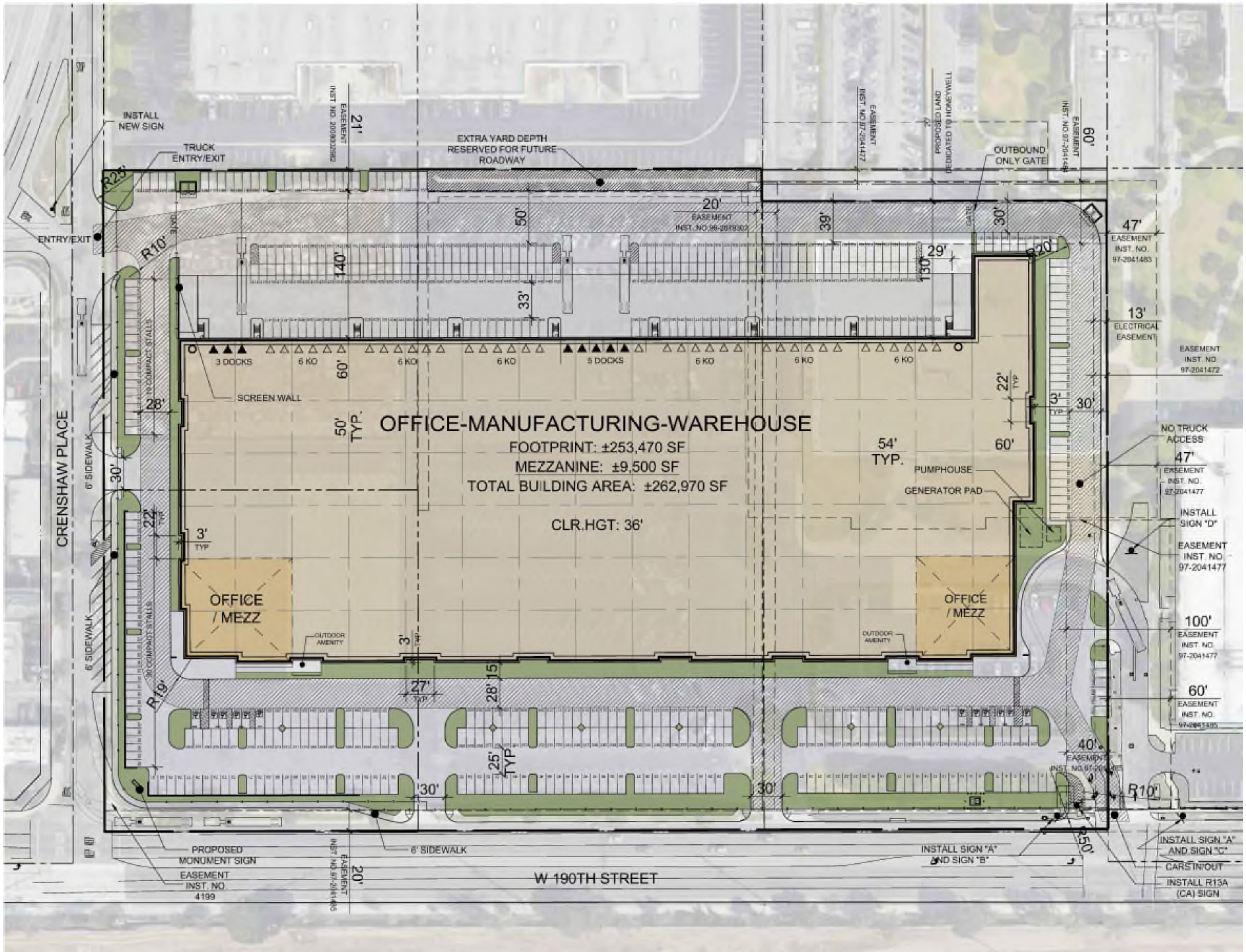


Figure 2
Site Plan

2. POLLUTANTS AND REGULATORY SETTING

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.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a 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 PM2.5 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.

The CARB have monitoring networks that measure ambient concentrations of certain TACs that are associated with important health-related effects and are present in appreciable concentrations in the area. The CARB publishes annual Statewide, air basin, and location-specific summaries of the concentration levels of several TACs and their resulting cancer risks[2]. The most recent summary is the CARB Air Quality Almanac for 2013 (CARB 2013). The Almanac presents the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data. These TACs are: acetaldehyde,

[2] Cancer risk is expressed as a probability of an individual out of a population of one million contracting cancer via a continuous exposure to TACs over a 30-year lifetime.

benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene. DPM is not directly measured but is indirectly estimated based on fine particulate matter measurements and special studies on the chemical speciation of ambient fine particulate data along with receptor modeling techniques. CARB showed that Diesel PM emissions decreased 37 percent from 2000 to 2010 primarily as a result of more stringent emissions standards and the introduction of cleaner burning diesel fuel. Emissions from diesel mobile sources are projected to continue to decrease after 2010. Overall, statewide emissions are forecasted to decline by 71 percent between 2000 and 2035. CARB estimates that 78 percent of the known statewide cancer risks are from the top 10 outdoor air toxics in addition to DPM.

Estimates of total cancer risk Statewide have shown a steady decline from the early 1990s when the cancer risk from DPM was estimated to be 1,696 in one million. By the year 2000, the cancer risk was estimated to be 1,005 in one million or a reduction of 41 percent. Reductions in cancer risk are expected to continue into the future as new emission controls are implemented that further reduce DPM emissions, the major component of the total airborne cancer risk.

Asbestos

Asbestos is listed as a TAC by the CARB and as a Hazardous Air Pollutant by the United States Environmental Protection Agency (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 Mountain Range, which is located approximately 108 miles east of the site, in Riverside County. 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 (EPA)

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

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).

State – California Air Resources Board and California Air Pollution Control Officers Association (CAPCOA)

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

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is known as DPM. More than 90% of DPM is less than 1 μm in diameter (about 1/70th the diameter of a human hair), and thus is a subset of particulate matter less than 2.5 microns in diameter (PM2.5). Most PM2.5 derives from combustion, such as use of gasoline and diesel fuels by motor vehicles, burning of natural gas to generate electricity, and wood burning. PM2.5 is the size of ambient particulate matter air pollution most associated with adverse health effects of the air pollutants that have ambient air quality standards. These health effects include cardiovascular and respiratory hospitalizations, and premature death. As a California statewide average, DPM comprises about 8% of PM2.5 in outdoor air, although DPM levels vary regionally due to the non-uniform distribution of sources throughout the state.

DPM is typically composed of carbon particles ("soot", also called black carbon, or BC) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds and oxides of nitrogen (NOx). NOx emissions from diesel engines are important because they can undergo chemical reactions in the atmosphere leading to formation of PM2.5 and ozone.

Most major sources of diesel emissions, such as ships, trains, and trucks operate in and around ports, rail yards, and heavily traveled roadways. These areas are often located near highly populated areas. Because of this, elevated DPM levels are mainly an urban problem, with large numbers of people exposed to higher DPM concentrations, resulting in greater health consequences compared to rural areas. A large fraction of personal exposure to DPM occurs during travel on roadways. Although Californians spend a relatively small proportion of their time in enclosed vehicles (about 7% for adults and teenagers, and 4% for children under 12), 30 to 55% of total daily DPM exposure typically occurs during the time people spend in motor vehicles.

As stated on page 2 of the California Air Pollution Control Officers Association (CAPCOA) *Health Risk Assessments for Proposed Land Use Projects* guidance document, "the guidance does not include how risk assessments for construction projects should be addressed in CEQA. As this is intended to be a 'living document', the risks near construction projects are expected to be included at a later time as the toxic emissions from construction activities are better quantified. State risk assessment policy is likely to change to reflect current science, and therefore this document will need modification as this occurs." (2009)

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 required 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 required an air district containing a selected location, by July 1, 2019, to deploy a system in the selected location. The bill authorized 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 authorized the state board, by January 1, 2020, and annually thereafter, to select additional locations for the deployment of the systems. The bill required 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 required the state board to publish the data on its Internet Web site.

State – Office of Environmental Health Hazard Assessment (OEHHA)

According to OEHHA, local air pollution control districts sometimes use the risk assessment guidelines for the Hot Spots program in permitting decisions for short-term projects such as construction or waste site remediation. Frequently, the issue of how to address cancer risks from short-term projects arises.

Cancer potency factors are based on animal lifetime studies or worker studies where there is long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime. There are some studies indicating that dose rate changes the potency of a given dose of a carcinogenic chemical. In others words, a dose delivered over a short time period may have a different potency than the same dose delivered over a lifetime. The OEHHA's evaluation of the impact of early-in-life exposure has reduced some of the uncertainty in evaluating the cancer risk to the general population for shorter-term exposures, as it helps account for susceptibility to carcinogens by age at exposure.

Regional

The project site is located within the City of Torrance, in 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.

SCAQMD

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.

In addition to attaining and maintaining air quality standards set by State and Federal Governments, the District is also responsible for ensuring that toxic air pollutants do not pose a nuisance or significant health threat to the surrounding community. Every year, the State's Air Toxics Hot Spots program (AB 2588) requires the District to quantify and assess health risks from subject facilities to nearby residents, notify affected residents of significant risks, and to reduce those significant health risks to acceptable levels.

The Project is located within the SCAQMD and is, therefore, subject to the rules and regulations of the SCAQMD. The SCAQMD has not established its own set of ambient air quality standards, and relies on the standards established by the ARB and the USEPA. The SCAQMD has, however, established health risk significance thresholds that it recommends to lead agencies in determining the health risk significance of new sources of air emissions under the California Environmental Quality Act.

In this regard, he SCAQMD has published a number of significance thresholds that apply to new projects operated within the SCAQMD. If the lead agency finds that a proposed project has the potential to exceed these health risk significance thresholds, the project would be considered to have a significant impact. These thresholds have been defined by SCAQMD based on scientific data the SCAQMD has obtained and factual data within the federal and State Clean Air Acts. The City of Torrance has not adopted its own set of significance thresholds. However, since the project is located within the SCAQMD, the SCAQMD thresholds have been adopted for this project. The SCAQMD has defined thresholds for health risk in terms of cancer risk and non-cancer hazard.

From the perspective of this analysis, the emissions were evaluated in terms of impacts on air quality from the construction of the project. SCAQMD does not require any construction-based health risk assessments or have any recommendations on how to conduct a construction HRA for CEQA purposes at this time. In the absence of SCAQMD guidance, OEHHA recommendations for short-term projects can be followed. The SCAQMD Health Risk Significance Threshold is discussed below.

Health Risk Significant Thresholds

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). As stated previously, SCAQMD does not require, or have any guidance or methodology for construction HRAs performed for CEQA projects.

3. CONSTRUCTION DIESEL EMISSIONS HEALTH RISK ASSESSMENT

The project is an industrial project and the potential health risk from project operations has been addressed previously in the Ganddini *190th Street Warehouse Project Air Quality, Global Climate Change, Health Risk Assessment, and Energy Impact Analysis* report dated September 7, 2022 (Updated August 18, 2025). Therefore, for informational and public disclosure purposes, a construction-based health risk assessment following the latest OEHHA guidance has been performed.

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

(1) Quantify project-generated TAC emissions.
(1) 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).
(2) 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.
(3) Characterize and compare the calculated health risks with the applicable health risk significance thresholds.

CONSTRUCTION HEALTH RISK ASSESSMENT ASSUMPTIONS

The U.S. Environmental Protection Agency (USEPA) AMS/EPA Regulatory Model (AERMOD) model, the air dispersion modeling method approved by the California Air Resources Board (CARB) for such assessments (USEPA 2006) was used to estimate concentrations of diesel particulate matter (DPM) from the construction of the project. The DPM construction emissions were estimated from CalEEMod data provided in the *190th Street Warehouse Project Air Quality, Global Climate Change, Health Risk Assessment, and Energy Impact Analysis* report dated September 7, 2022 (updated July 25, 2025; see Appendix C for the CalEEMod printout) and amount to annual maximum emissions of 0.0536 tons per year of DPM (as PM_{10} exhaust; see Table 1). The emissions were represented in the model as an area source equal to the size of the project's construction area (approximately 54,728 meters squared). An emission release height of 12 feet was also assumed, to account for the average emissions height from all pieces of construction equipment. Receptor locations where construction impacts were calculated focused on the residential receptors located adjacent to the project site. Meteorological data used in the model is from the closest monitoring station, the Hawthorne monitoring station, approximately 4.3 miles north-northwest of the project site.

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 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 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 (as applicable). It captures the essential atmospheric physical processes and provides reasonable estimates over a wide range of meteorological conditions and modeling scenarios.

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 website[3] (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:

[Dose-air (mg/(Kg-day)]*Cancer Potency*[1x10^{-6}] = Potential Cancer Risk

Where:
Cancer Potency Factor = 1.1
Dose-inh = (C¬air * DBR * A * EF * ED *ASF*FAH* 10-6) / 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
10^6 [Micrograms to milligrams conversion]
AT [Average time period over which exposure is averaged in days] = 25,550

[3] https://www.aqmd.gov/assets/aermet/AERMET_files_And_HRA_Tool.html

The model run results are shown in Appendix B. Figure 5 illustrates the cancer risk to the most affected age-group, infants (0-2 years).

As stated above, 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. As the project was to be constructed over a duration of less than two years, only the impacts to the most sensitive groups, 3rd trimester and infants were evaluated and the exposure frequency and duration were adjusted to correspond to the number of construction days/construction time as necessary (see Tables 3 and 4 for calculation details). The model run result for the most impacted group is shown below on Figure 5 (for infants 0-2 years). Complete model run results for all groups analyzed are available in Appendix B. Tables 3 and 4 provide a summary of the calculated construction diesel emission concentrations at the nearest fetus (3rd trimester) and infant (0-2 years) receptors respectively. Tables 3 and 4 show that 3rd trimester exposure and infant 0–2-year exposure will not result in a cancer risk in excess of 10 in a million. Table 3 shows that the highest construction-related health risk to 3rd trimester fetus 0.25 years is at receptor 2, with a cancer risk of 0.18 in a million. Table 4 shows that the highest construction-related health risk to infants 0-2 years is at receptor 2, with a cancer risk of 3.30 in a million. As these most-vulnerable age groups would not be exposed to cancer risks in excess of 10 in a million, children 2-16 years and adults in the project vicinity would also not be exposed to cancer risks in excess of 10 in a million.

Therefore, the construction of the proposed project would result in a less than significant impact due to the cancer risk from diesel emissions created by project-related construction equipment.

Non-Cancer Risks

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

HIDPM = CDPM/RELDPM

Where,

HIDPM	=	Hazard Index; an expression of the potential for non-cancer health effects.
CDPM	=	Annual average diesel particulate matter concentration in µg/m3.
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 adult, child and infant receptors are also detailed in Tables 3 and 4 in column (j). The RELDPM is 5 µg/m3. The Office of Environmental Health Hazard Assessment as protective for the respiratory system has established this concentration. Using the maximum DPM concentration from years 2025-2027, the resulting Hazard Index is:

HIDPM = 0.01803/5 = 0.0036

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

Table 1
Construction-Based Emissions Factors

Year	tons/yr of DPM	Duration
2025-27	0.0536	2 yr exposure

Source: CalEEMod Maximum Annual Construction Emissions for 190th Street Warehouse Project AQ-GHG-HRA and Energy Impact Analysis. July 2025.

Table 2

General Modeling Assumptions - AERMOD Model

Feature	Option Selected
Terrain processing	AERMAP-generated NED GEOTIFF 30 m
Regulatory dispersion options	Default
Land use	Urban
Coordinate system	UTM Zone 11 North
Building downwash	Included in calculations (as applicable)
Receptor height	0 meters above ground per SCAQMD AERMOD guidance
Release height	12 feet (approximate average for all construction equipment)
Meteorological data	SCAQMD Hawthorne Meteorological Data

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

Receptor ID (a)	Maximum Concentration (ug/m3) (b)	Maximum Concentration (mg/m3) (c)	Weight Fraction (d)	Contaminant (e)	Carcinogenic Hazards: CPF (mg/kg/day) (f)	Carcinogenic Hazards: RISK (per million) (g)	Noncarcinogenic Hazards: REL (ug/m3) (h)	Noncarcinogenic Hazards: RfD (mg/kg/day) (i)	Noncarcinogenic Hazards: Index (j)
1	0.0132	1.3E-05	1.00E+00	DPM	1.1E+00	0.13	5.0E+00	1.4E-03	0.0026
2	0.01804	1.8E-05	1.00E+00	DPM	1.1E+00	0.18	5.0E+00	1.4E-03	0.0036
3	0.01097	1.1E-05	1.00E+00	DPM	1.1E+00	0.11	5.0E+00	1.4E-03	0.0022
4	0.00677	6.8E-06	1.00E+00	DPM	1.1E+00	0.07	5.0E+00	1.4E-03	0.0014
5	0.00355	3.6E-06	1.00E+00	DPM	1.1E+00	0.04	5.0E+00	1.4E-03	0.0007
6	0.00224	2.2E-06	1.00E+00	DPM	1.1E+00	0.02	5.0E+00	1.4E-03	0.0004
7	0.00601	6.0E-06	1.00E+00	DPM	1.1E+00	0.06	5.0E+00	1.4E-03	0.0012
8	0.00419	4.2E-06	1.00E+00	DPM	1.1E+00	0.04	5.0E+00	1.4E-03	0.0008

Notes:

Exposure factors used to calculate TAC intake for Short-term Exposure

Exposure Frequency (days/year)	260	(# of construction days in 2023)
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 $_{(non\text{-}cancer)}$ (days)	91.25	

E= 10^X, i.e. E-02 = 10^{-2}

Table 4
Carcinogenic Risks and Non-Carcinogenic Infant Exposure Scenario (0-2 Years)

Receptor	Maximum Concentration		Weight		Carcinogenic Hazards		Noncarcinogenic Hazards		
					CPF	RISK (per million)	REL	RfD	
ID	(ug/m3)	(mg/m3)	Fraction	Contaminant	(mg/kg/day)		(ug/m3)	(mg/kg/day)	Index
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1	0.0132	1.3E-05	1.00E+00	DPM	1.1E+00	2.42	5.0E+00	1.4E-03	0.0026
2	0.01804	1.8E-05	1.00E+00	DPM	1.1E+00	3.30	5.0E+00	1.4E-03	0.0036
3	0.01097	1.1E-05	1.00E+00	DPM	1.1E+00	2.01	5.0E+00	1.4E-03	0.0022
4	0.00677	6.8E-06	1.00E+00	DPM	1.1E+00	1.24	5.0E+00	1.4E-03	0.0014
5	0.00355	3.6E-06	1.00E+00	DPM	1.1E+00	0.65	5.0E+00	1.4E-03	0.0007
6	0.00224	2.2E-06	1.00E+00	DPM	1.1E+00	0.41	5.0E+00	1.4E-03	0.0004
7	0.00601	6.0E-06	1.00E+00	DPM	1.1E+00	1.10	5.0E+00	1.4E-03	0.0012
8	0.00419	4.2E-06	1.00E+00	DPM	1.1E+00	0.77	5.0E+00	1.4E-03	0.0008

Notes:

Exposure factors used to calculate TAC intake for Short-term Exposure

Exposure Frequency (days/year)	260	(construction days/year)
Exposure Duration (years)	1.5	(total construction time)
Daily Breathing Rate	1090	
Age Sensitivity Factor	10	
Fraction of Time At Home (FAH)	1	
Averaging Time $_{(cancer)}$ (days)	25550	
Averaging Time $_{(non\text{-}cancer)}$ (days)	547.5	

E= 10^X, i.e. E-02 = 10^{-2}

Figure 3
AERMOD Model Source and Receptor Placement

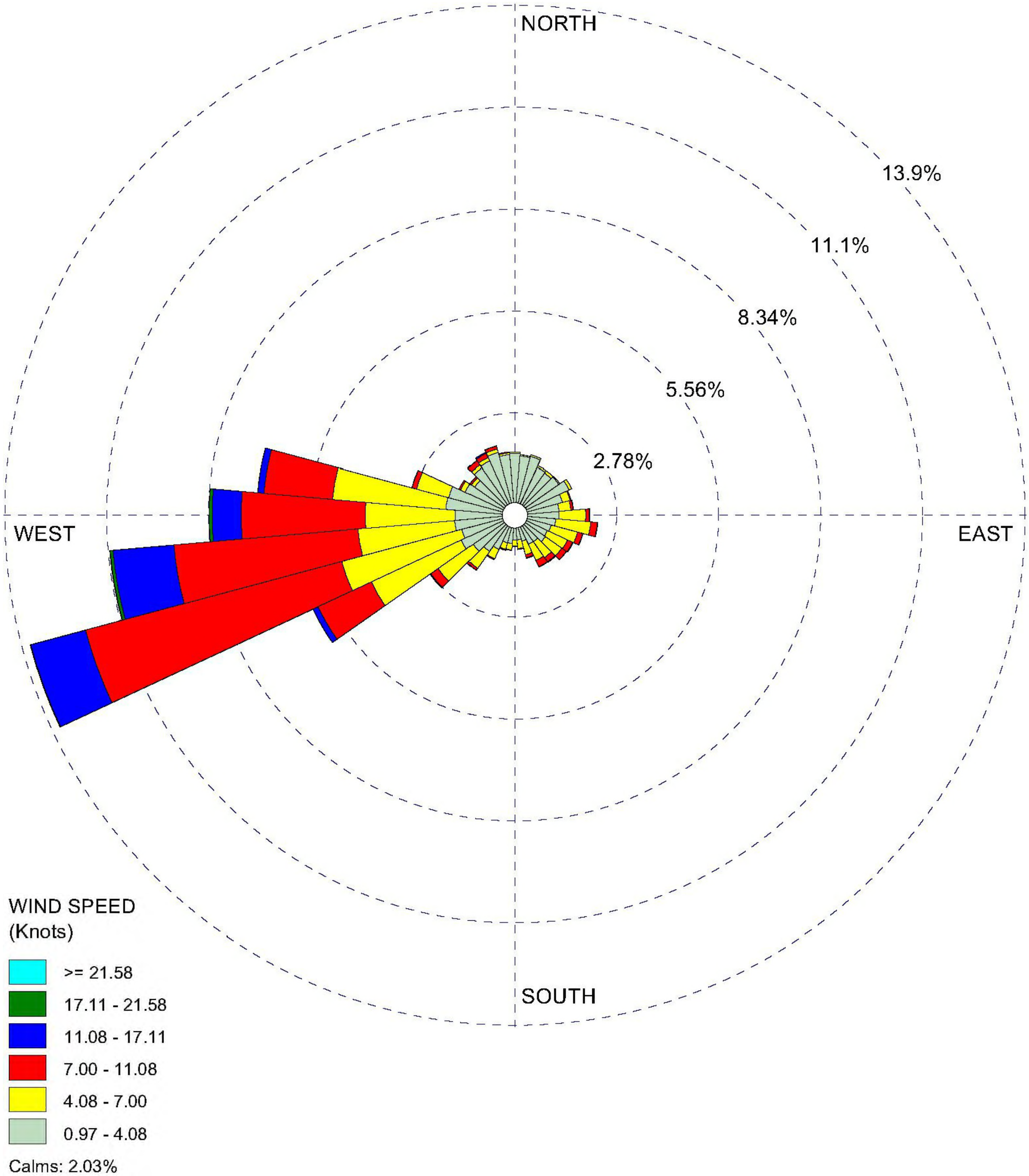
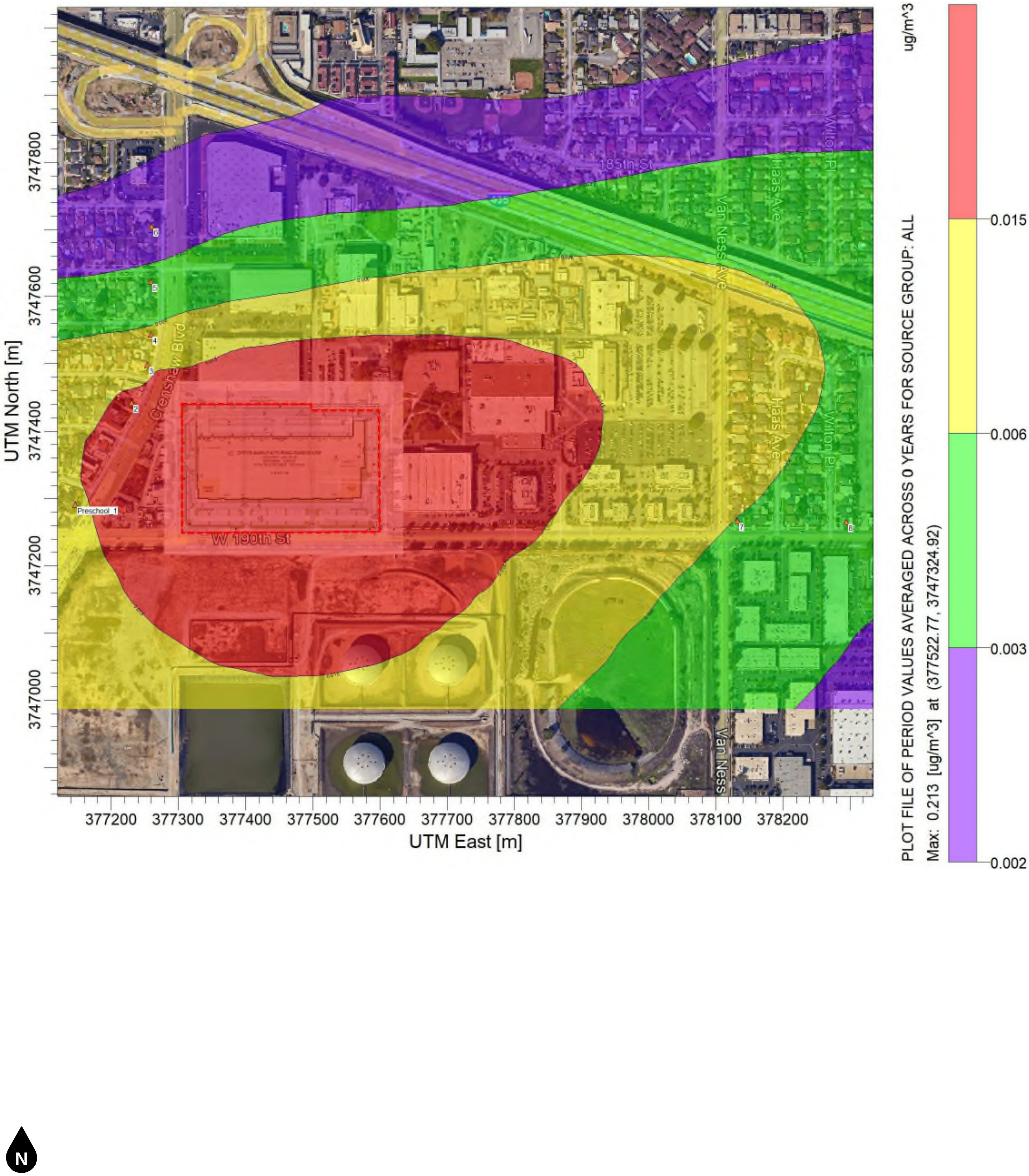


Figure 4
Wind Rose: Hawthorne



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. MITIGATION MEASURES

CONSTRUCTION MEASURES

Health risk impacts are less than significant. No construction mitigation is required.

5. REFERENCES

California Air Pollution Control Officers Association

2009 Health Risk Assessments for Proposed Land Use Projects

California Air Resources Board

2008 Resolution 08-43

2008 Airborne Toxic Control Measure for in-use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, Section 2477 of Division 3, Chapter 9, Title 13, California Code of Regulations

2008 ARB Recommended Interim Risk Management Policy for Inhalation-Based Residential Cancer Risk – Frequently Asked Questions

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

Institute of Transportation Engineers

2021 Trip Generation Manual, 11th Edition.

Office of Environmental Health Hazard Assessment

2015 Air Toxics Hot Spots Program Risk Assessment Guidelines

City of Torrance

2010 City of Torrance General Plan. April 6.

2017 City of Torrance Climate Action Plan. December.

Ganddini Group, Inc.

2025 190th Street Warehouse Project Air Quality, Global Climate Change, Health Risk Assessment, and Energy Impact Analysis. September 7, 2022 (Updated August 18).

South Coast Air Quality Management District

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

2021 MATES-V Multiple Air Toxics Exposure Study in the South Coast Air Basin. Final Report. August.

U.S. Geological Survey

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

APPENDICES

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_2e	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
$MTCO_2e$	Metric tons of carbon dioxide equivalent
$MMTCO_2e$	Million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NOx	Nitrogen Oxides
NO_2	Nitrogen dioxide
N_2O	Nitrous oxide
OEHHA	Office of Environmental Health Hazard Assessment
O_3	Ozone
OPR	Governor's Office of Planning and Research
PFCs	Perfluorocarbons
PM	Particle matter
PM10	Particles that are less than 10 micrometers in diameter
PM2.5	Particles that are less than 2.5 micrometers in diameter
PMI	Point of maximum impact
PPM	Parts per million
PPB	Parts per billion
SCAB	South Coast Air Basin
SF_6	Sulfur hexafluoride
SIP	State Implementation Plan
SOx	Sulfur Oxides
TAC	Toxic air contaminants
VOC	Volatile organic compounds

APPENDIX B

HRA DATA AND AERMOD MODEL PRINTOUTS

190th St Warehouse - Annual Max Emissions

Estimate of Annual Construction DPM Emissions (as PM10 exhaust)

Annual Max PM10 Exhaust Emissions During Construction as estimated in the CalEEMod model.	0.0536	tons/year
Average Emissions	0.001543278	grams/sec
Total size of the emission source from AERMOD	54728	meters squared
Average area source emission	2.8199E-08	grams/m2-sec

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 7/22/2025
** File: C:\Lakes\AERMOD View\19260 190th St Warehouse Construction, 2025\19260 190th St Warehouse Construction, 2025.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE 190th St Warehouse
   TITLETWO Construction-related DPM concentrations
   MODELOPT DFAULT CONC
   AVERTIME PERIOD
   URBANOPT 9818605 Los_Angeles_County_Population
   POLLUTID DPM
   RUNORNOT RUN
   ERRORFIL "19260 190th St Warehouse Construction, 2025.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1       AREAPOLY   377306.090  3747440.240       19.120
** DESCRSRC Construction footprint
** Source Parameters **
   SRCPARAM PAREA1       2.8199E-08     3.658         6
   AREAVERT PAREA1       377306.090 3747440.240 377497.277 3747440.573
   AREAVERT PAREA1       377497.842 3747431.113 377598.457 3747431.113
   AREAVERT PAREA1       377599.022 3747250.799 377305.940 3747249.668
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
```

```
****************************************
**
**
RE STARTING
   INCLUDED "19260 190th St Warehouse Construction, 2025.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
** Auto-Generated Plotfiles
   PLOTFILE PERIOD ALL "19260 190TH ST WAREHOUSE CONSTRUCTION, 2025.AD\PE00GALL.PLT" 31
   SUMMFILE "19260 190th St Warehouse Construction, 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            2 Warning Message(s)
 A Total of            0 Informational Message(s)


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


    ********   WARNING MESSAGES   ********
 ME W186      68       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187      68       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
```

```
 *** SETUP Finishes Successfully ***
 ***********************************

↑ *** AERMOD - VERSION 23132  ***   *** 190th St Warehouse                                                          ***        07/22/25
 *** AERMET - VERSION  22112 ***   *** Construction-related DPM concentrations                                      ***        16:50:45
                                                                                                                               PAGE   1
 *** MODELOPTs:    RegDFAULT  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     1 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =   9818605.0 ;  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:      1 Source(s);       1 Source Group(s); and     449 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:      0 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 =      3.6 MB of RAM.

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

**Detailed Error/Message File:   19260 190th St Warehouse Construction, 2025.err
**File for Summary of Results:   19260 190th St Warehouse Construction, 2025.sum
```


*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	LOCATION OF AREA Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
PAREA1	0	0.28199E-07	377306.1	3747440.2	19.1	3.66	6	0.00	YES		NO

*** SOURCE IDs DEFINING SOURCE GROUPS ***

```
SRCGROUP ID                                             SOURCE IDs
-----------                                             ----------


 ALL        PAREA1      ,
```

```
*** AERMET - VERSION  22112 ***   *** Construction-related DPM concentrations                              ***        16:50:45
                                                                                                                      PAGE   4
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


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

 URBAN ID   URBAN POP                                SOURCE IDs
 --------   ---------                                ----------


             9818605.   PAREA1      ,
 *** AERMOD - VERSION 23132  ***   *** 190th St Warehouse                                                    ***        07/22/25
*** AERMET - VERSION  22112 ***   *** Construction-related DPM concentrations                              ***        16:50:45
                                                                                                                      PAGE   5
*** 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                                                    ***        07/22/25
*** AERMET - VERSION  22112 ***   *** Construction-related DPM concentrations                              ***        16:50:45
                                                                                                                      PAGE   6
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                    *** NETWORK ID: UCART1   ;  NETWORK TYPE: GRIDCART ***

                                                 * ELEVATION HEIGHTS IN METERS *

   Y-COORD  |                                        X-COORD (METERS)
   (METERS) |     376998.97    377086.27    377173.57    377260.87    377348.17    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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-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	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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (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	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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-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

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (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

*** 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);
```


*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1
```

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)

1.54,   3.09,   5.14,   8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

```
  Surface file:   E:\New MET data\khhr_sfc_pfl\KHHR_V11_trimmed.sfc                                Met Version:  22112
  Profile file:   E:\New MET data\khhr_sfc_pfl\KHHR_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
```

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                                              ***        07/22/25
*** AERMET - VERSION  22112 ***   *** Construction-related DPM concentrations                         ***        16:50:45
                                                                                                                 PAGE  15
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                             *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: ALL      ***
                                 INCLUDING SOURCE(S):     PAREA1      ,

                                  *** NETWORK ID: UCART1   ;  NETWORK TYPE: GRIDCART ***

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

   Y-COORD  |                                               X-COORD (METERS)
   (METERS) |     376998.97    377086.27    377173.57    377260.87    377348.17    377435.47    377522.77    377610.07    377697.37
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 3748114.24 |       0.00051      0.00055      0.00060      0.00065      0.00070      0.00075      0.00080      0.00084      0.00086
 3748057.86 |       0.00060      0.00062      0.00068      0.00074      0.00080      0.00087      0.00093      0.00097      0.00098
 3748001.48 |       0.00063      0.00072      0.00076      0.00085      0.00093      0.00101      0.00108      0.00112      0.00113
 3747945.10 |       0.00072      0.00079      0.00088      0.00093      0.00109      0.00119      0.00128      0.00132      0.00132
 3747888.72 |       0.00083      0.00090      0.00101      0.00115      0.00129      0.00130      0.00154      0.00158      0.00156
 3747832.34 |       0.00100      0.00106      0.00119      0.00137      0.00158      0.00177      0.00188      0.00191      0.00190
 3747775.96 |       0.00125      0.00130      0.00144      0.00167      0.00196      0.00223      0.00238      0.00241      0.00240
 3747719.58 |       0.00164      0.00168      0.00181      0.00209      0.00251      0.00289      0.00309      0.00316      0.00327
 3747663.20 |       0.00225      0.00230      0.00242      0.00277      0.00336      0.00393      0.00426      0.00449      0.00484
```

3747606.82	0.00313	0.00333	0.00352	0.00396	0.00487	0.00574	0.00648	0.00718	0.00791
3747550.44	0.00426	0.00490	0.00554	0.00636	0.00803	0.00967	0.01177	0.01328	0.01396
3747494.06	0.00545	0.00694	0.00897	0.01181	0.01692	0.02313	0.02798	0.02817	0.02547
3747437.68	0.00637	0.00883	0.01322	0.02439	0.07685	0.10747	0.10181	0.07690	0.04190
3747381.30	0.00671	0.00982	0.01614	0.03573	0.14298	0.19073	0.19681	0.12973	0.05132
3747324.92	0.00647	0.00969	0.01672	0.03998	0.15517	0.20719	0.21282	0.13647	0.04923
3747268.54	0.00593	0.00884	0.01516	0.03556	0.13530	0.17741	0.17769	0.10869	0.03689
3747212.16	0.00543	0.00796	0.01297	0.02524	0.05252	0.06580	0.06471	0.04488	0.02461
3747155.78	0.00509	0.00730	0.01123	0.01850	0.02851	0.03468	0.03404	0.02658	0.01805
3747099.40	0.00485	0.00673	0.00969	0.01409	0.01912	0.02229	0.02199	0.01845	0.01391
3747043.02	0.00460	0.00613	0.00829	0.01107	0.01395	0.01576	0.01565	0.01376	0.01107
3746986.64	0.00430	0.00552	0.00708	0.00891	0.01058	0.01168	0.01181	0.01072	0.00903

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

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

Y-COORD (METERS)	X-COORD (METERS) 377784.67	377871.97	377959.27	378046.57	378133.87	378221.17	378308.47	378395.77	378483.07
3748114.24	0.00085	0.00083	0.00081	0.00080	0.00082	0.00087	0.00094	0.00102	0.00110
3748057.86	0.00097	0.00094	0.00092	0.00093	0.00098	0.00106	0.00116	0.00126	0.00135
3748001.48	0.00111	0.00108	0.00108	0.00112	0.00121	0.00133	0.00145	0.00156	0.00165
3747945.10	0.00129	0.00127	0.00131	0.00141	0.00155	0.00170	0.00184	0.00194	0.00199
3747888.72	0.00154	0.00156	0.00167	0.00183	0.00202	0.00219	0.00231	0.00237	0.00238
3747832.34	0.00191	0.00201	0.00222	0.00246	0.00267	0.00282	0.00288	0.00286	0.00278
3747775.96	0.00250	0.00275	0.00307	0.00335	0.00352	0.00357	0.00350	0.00336	0.00316
3747719.58	0.00355	0.00393	0.00431	0.00455	0.00455	0.00440	0.00414	0.00383	0.00351
3747663.20	0.00539	0.00590	0.00610	0.00593	0.00569	0.00524	0.00473	0.00424	0.00378
3747606.82	0.00860	0.00879	0.00840	0.00766	0.00677	0.00592	0.00519	0.00452	0.00395
3747550.44	0.01379	0.01254	0.01085	0.00917	0.00770	0.00647	0.00538	0.00465	0.00400
3747494.06	0.02081	0.01640	0.01287	0.01018	0.00817	0.00666	0.00551	0.00463	0.00393
3747437.68	0.02716	0.01891	0.01377	0.01042	0.00813	0.00651	0.00534	0.00446	0.00378
3747381.30	0.02926	0.01896	0.01330	0.00987	0.00763	0.00609	0.00499	0.00417	0.00355
3747324.92	0.02632	0.01676	0.01177	0.00879	0.00685	0.00552	0.00455	0.00383	0.00328
3747268.54	0.02064	0.01367	0.00989	0.00756	0.00600	0.00490	0.00410	0.00348	0.00300
3747212.16	0.01564	0.01101	0.00827	0.00648	0.00525	0.00435	0.00368	0.00316	0.00275
3747155.78	0.01246	0.00914	0.00705	0.00563	0.00464	0.00390	0.00333	0.00288	0.00252
3747099.40	0.01031	0.00787	0.00620	0.00502	0.00418	0.00354	0.00305	0.00266	0.00234
3747043.02	0.00866	0.00683	0.00552	0.00453	0.00382	0.00326	0.00283	0.00247	0.00219
3746986.64	0.00735	0.00597	0.00493	0.00412	0.00351	0.00302	0.00263	0.00232	0.00206

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 ,

*** 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	0.00118	0.00124	0.00129
3748057.86	0.00142	0.00147	0.00150
3748001.48	0.00170	0.00172	0.00172
3747945.10	0.00201	0.00199	0.00194
3747888.72	0.00233	0.00225	0.00215
3747832.34	0.00265	0.00250	0.00234
3747775.96	0.00294	0.00272	0.00250
3747719.58	0.00319	0.00289	0.00262
3747663.20	0.00336	0.00300	0.00268
3747606.82	0.00346	0.00305	0.00270
3747550.44	0.00347	0.00303	0.00267
3747494.06	0.00339	0.00296	0.00260
3747437.68	0.00325	0.00282	0.00249
3747381.30	0.00306	0.00267	0.00235
3747324.92	0.00284	0.00249	0.00220
3747268.54	0.00262	0.00231	0.00205
3747212.16	0.00241	0.00214	0.00191
3747155.78	0.00223	0.00199	0.00179
3747099.40	0.00208	0.00186	0.00168
3747043.02	0.00196	0.00176	0.00159
3746986.64	0.00185	0.00167	0.00151

*** AERMOD - VERSION 23132 *** *** 190th St Warehouse *** 07/22/25
*** AERMET - VERSION 22112 *** *** Construction-related DPM concentrations *** 16:50:45
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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): PAREA1 ,

```
                                              *** DISCRETE CARTESIAN RECEPTOR POINTS ***

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

      X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)   Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        377146.65    3747291.37       0.01320                        377230.47    3747442.55       0.01803
        377253.39    3747498.09       0.01097                        377259.26    3747543.71       0.00677
        377259.26    3747621.90       0.00355                        377260.56    3747704.66       0.00224
        378132.19    3747267.37       0.00601                        378294.52    3747265.66       0.00419
```



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


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

                                                                                                      NETWORK
GROUP ID                       AVERAGE CONC               RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       0.21282 AT (  377522.77,  3747324.92,    20.40,    20.40,    0.00)  GC  UCART1
          2ND HIGHEST VALUE IS       0.20719 AT (  377435.47,  3747324.92,    19.30,    19.30,    0.00)  GC  UCART1
          3RD HIGHEST VALUE IS       0.19681 AT (  377522.77,  3747381.30,    20.40,    20.40,    0.00)  GC  UCART1
          4TH HIGHEST VALUE IS       0.19073 AT (  377435.47,  3747381.30,    19.60,    19.60,    0.00)  GC  UCART1
          5TH HIGHEST VALUE IS       0.17769 AT (  377522.77,  3747268.54,    19.60,    19.60,    0.00)  GC  UCART1
          6TH HIGHEST VALUE IS       0.17741 AT (  377435.47,  3747268.54,    19.30,    19.30,    0.00)  GC  UCART1
          7TH HIGHEST VALUE IS       0.15517 AT (  377348.17,  3747324.92,    18.90,    18.90,    0.00)  GC  UCART1
          8TH HIGHEST VALUE IS       0.14298 AT (  377348.17,  3747381.30,    19.00,    19.00,    0.00)  GC  UCART1
          9TH HIGHEST VALUE IS       0.13647 AT (  377610.07,  3747324.92,    19.70,    19.70,    0.00)  GC  UCART1
         10TH HIGHEST VALUE IS       0.13530 AT (  377348.17,  3747268.54,    18.50,    18.50,    0.00)  GC  UCART1


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



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

  --------- Summary of Total Messages --------
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```
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      68       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
ME W187      68       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 ***
   ************************************
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Appendix C

CalEEMod Model Printout

190th St Warehouse v3 Detailed Report

Table of Contents

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.	9.82	6.36	24.7	0.04	0.37	2.02	2.39	0.36	0.51	0.87	272	8,861	9,134	28.2	0.41	47.9	10,010
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.93	6.33	12.6	0.04	0.35	2.02	2.37	0.34	0.51	0.86	272	8,723	8,996	28.2	0.42	41.3	9,866
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.29	4.04	16.6	0.03	0.25	1.51	1.75	0.24	0.38	0.62	272	7,782	8,055	28.2	0.39	43.4	8,918
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.51	0.74	3.03	0.01	0.05	0.28	0.32	0.04	0.07	0.11	45.1	1,288	1,334	4.66	0.06	7.18	1,477

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	0.71	2.00	1.93	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	365	365	0.01	< 0.005	0.00	366
Total	9.82	6.36	24.7	0.04	0.37	2.02	2.39	0.36	0.51	0.87	272	8,861	9,134	28.2	0.41	47.9	10,010
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	0.71	2.00	1.93	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	365	365	0.01	< 0.005	0.00	366
Total	7.93	6.33	12.6	0.04	0.35	2.02	2.37	0.34	0.51	0.86	272	8,723	8,996	28.2	0.42	41.3	9,866
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	0.05	0.15	0.16	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	28.0	28.0	< 0.005	< 0.005	0.00	28.1
Total	8.29	4.04	16.6	0.03	0.25	1.51	1.75	0.24	0.38	0.62	272	7,782	8,055	28.2	0.39	43.4	8,918
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	0.03	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	4.64	4.64	< 0.005	< 0.005	0.00	4.66
Total	1.51	0.74	3.03	0.01	0.05	0.28	0.32	0.04	0.07	0.11	45.1	1,288	1,334	4.66	0.06	7.18	1,477

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

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

undefine	—	—	—	—	—	—	—	—	—	—	—	127	127	0.01	< 0.005	—	128
Total	—	—	—	—	—	—	—	—	—	—	—	2,651	2,651	0.25	0.03	—	2,667
Daily, Winter (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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	58.0	58.0	0.01	< 0.005	—	58.3
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No	—	—	—	—	—	—	—	—	—	—	35.0	118	153	3.60	0.09	—	269
Manufacturing	—	—	—	—	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	35.0	118	153	3.60	0.09	—	269
Manufacturing	—	—	—	—	—	—	—	—	—	—	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	5.79	19.6	25.4	0.60	0.01	—	44.5
Manufacturing	—	—	—	—	—	—	—	—	—	—	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	0.10	0.29	0.37	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	52.5	52.5	< 0.005	< 0.005	0.00	52.6
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	0.71	2.00	1.93	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	365	365	0.01	< 0.005	0.00	366
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.10	0.29	0.37	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	52.5	52.5	< 0.005	< 0.005	0.00	52.6
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	0.71	2.00	1.93	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	365	365	0.01	< 0.005	0.00	366
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	< 0.005	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	1.24	1.24	< 0.005	< 0.005	0.00	1.24
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	0.03	0.03	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	4.64	4.64	< 0.005	< 0.005	0.00	4.66

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/Backhoes	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/Backhoes	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	125	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)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	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.

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